

Welcome to STN International! Enter x:x

LOGINID:sssptaul25rxt

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

\* \* \* \* \* Welcome to STN International \* \* \* \* \*

NEWS	1		Web Page URLs for STN Seminar Schedule - N. America
NEWS	2	Apr 08	"Ask CAS" for self-help around the clock
NEWS	3	Jun 03	New e-mail delivery for search results now available
NEWS	4	Aug 08	PHARMAMarketLetter(PHARMAML) - new on STN
NEWS	5	Aug 19	Aquatic Toxicity Information Retrieval (AQUIRE) now available on STN
NEWS	6	Aug 26	Sequence searching in REGISTRY enhanced
NEWS	7	Sep 03	JAPIO has been reloaded and enhanced
NEWS	8	Sep 16	Experimental properties added to the REGISTRY file
NEWS	9	Sep 16	CA Section Thesaurus available in CAPLUS and CA
NEWS	10	Oct 01	CASREACT Enriched with Reactions from 1907 to 1985
NEWS	11	Oct 24	BEILSTEIN adds new search fields
NEWS	12	Oct 24	Nutraceuticals International (NUTRACEUT) now available on STN
NEWS	13	Nov 18	DKILIT has been renamed APOLLIT
NEWS	14	Nov 25	More calculated properties added to REGISTRY
NEWS	15	Dec 04	CSA files on STN
NEWS	16	Dec 17	PCTFULL now covers WP/PCT Applications from 1978 to date
NEWS	17	Dec 17	TOXCENTER enhanced with additional content
NEWS	18	Dec 17	Adis Clinical Trials Insight now available on STN
NEWS	19	Jan 29	Simultaneous left and right truncation added to COMPENDEX, ENERGY, INSPEC
NEWS	20	Feb 13	CANCERLIT is no longer being updated
NEWS	21	Feb 24	METADEX enhancements
NEWS	22	Feb 24	PCTGEN now available on STN
NEWS	23	Feb 24	TEMA now available on STN
NEWS	24	Feb 26	NTIS now allows simultaneous left and right truncation
NEWS	25	Feb 26	PCTFULL now contains images
NEWS	26	Mar 04	SDI PACKAGE for monthly delivery of multifile SDI results
NEWS	27	Mar 19	APOLLIT offering free connect time in April 2003
NEWS	28	Mar 20	EVENTLINE will be removed from STN
NEWS	29	Mar 24	PATDPAFULL now available on STN
NEWS	30	Mar 24	Additional information for trade-named substances without structures available in REGISTRY
NEWS	31	Mar 24	Indexing from 1957 to 1966 added to records in CA/CAPLUS
NEWS	32	Apr 11	Display formats in DGENE enhanced
NEWS	33	Apr 14	MEDLINE Reload
NEWS EXPRESS			April 4 CURRENT WINDOWS VERSION IS V6.01a, CURRENT MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP), AND CURRENT DISCOVER FILE IS DATED 01 APRIL 2003
NEWS HOURS			STN Operating Hours Plus Help Desk Availability
NEWS INTER			General Internet Information
NEWS LOGIN			Welcome Banner and News Items
NEWS PHONE			Direct Dial and Telecommunication Network Access to STN
NEWS WWW			CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

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\* \* \* \* \* STN Columbus \* \* \* \* \*

FILE 'HOME' ENTERED AT 15:25:42 ON 16 APR 2003

=> file reg

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.21

0.21

FILE 'REGISTRY' ENTERED AT 15:25:51 ON 16 APR 2003

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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 15 APR 2003 HIGHEST RN 503084-53-5

DICTIONARY FILE UPDATES: 15 APR 2003 HIGHEST RN 503084-53-5

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:  
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=> s name

L1 4 NAME

=> d l1 4

L1 ANSWER 4 OF 4 REGISTRY COPYRIGHT 2003 ACS

RN 50903-99-6 REGISTRY

CN L-Ornithine, N5-[imino(nitroamino)methyl]-, methyl ester (9CI) (CA INDEX NAME)

OTHER NAMES:

CN L-NAME

CN L-NAME

CN N-Nitro-L-arginine methyl ester

CN N.omega.-Nitro-L-arginine methyl ester

CN N.omega.-Nitro-L-arginine methyl ester

CN NAME

CN NG-Nitro-L-arginine Me ester

CN NG-Nitro-L-arginine methyl ester

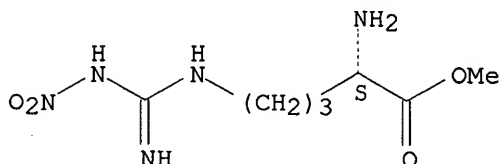
FS STEREOSEARCH

DR 162715-84-6, 126265-24-5, 189639-12-1

MF C7 H15 N5 O4

CI COM  
 LC STN Files: ADISINSIGHT, ADISNEWS, AGRICOLA, BEILSTEIN\*, BIOBUSINESS,  
 BIOSIS, BIOTECHNO, CA, CANCERLIT, CAPLUS, CASREACT, CEN, CHEMCATS, CIN,  
 DIOGENES, EMBASE, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, PROMT, RTECS\*,  
 TOXCENTER, USPAT2, USPATFULL  
 (\*File contains numerically searchable property data)

Absolute stereochemistry.



514/554,588

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1368 REFERENCES IN FILE CA (1962 TO DATE)  
 6 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 1373 REFERENCES IN FILE CAPLUS (1962 TO DATE)

=> s mifepristone

L2 5 MIFEPRISTONE

=> d 12 5

L2 ANSWER 5 OF 5 REGISTRY COPYRIGHT 2003 ACS

RN 84371-65-3 REGISTRY

CN Estradiol-4,9-dien-3-one, 11-[4-(dimethylamino)phenyl]-17-hydroxy-17-(1-propynyl)-, (11.beta.,17.beta.)- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 17.beta.-Hydroxy-11.beta.-[4-(dimethylamino)-phenyl]-17.alpha.-(prop-1-ynyl)-estra-4,9-dien-3-one

CN CDB 2477

CN Mifegyne

CN Mifeprex

CN **Mifepristone**

CN Mifestone

CN R 38486

CN RU 38486

CN RU 486

CN RU 486-6

CN RU486

FS STEREOSEARCH

DR 122742-25-0, 83203-42-3

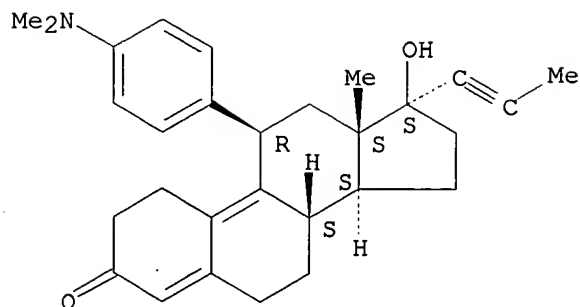
MF C29 H35 N O2

CI COM

LC STN Files: ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN\*,  
 BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAPLUS, CASREACT, CBNB,  
 CEN, CHEMCATS, CIN, CSCHM, DDFU, DIOGENES, DRUGNL, DRUGPAT, DRUGU,  
 DRUGUPDATES, EMBASE, GMELIN\*, HSDB\*, IPA, MEDLINE, MRCK\*, PHAR, PROMT,  
 RTECS\*, SYNTHLINE, TOXCENTER, USAN, USPAT2, USPATFULL, VETU  
 (\*File contains numerically searchable property data)

Other Sources: WHO

Absolute stereochemistry.



514 1171

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1811 REFERENCES IN FILE CA (1962 TO DATE)

59 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

1813 REFERENCES IN FILE CAPLUS (1962 TO DATE)

=> s org31710

L3 0 ORG31710

=> s org 3171-

546 ORG

590 3171

L4 0 ORG 3171-

(ORG(W) 3171)

=> s org 31710

546 ORG

20 31710

L5 1 ORG 31710

(ORG(W) 31710)

=> s 15

546 ORG

20 31710

L6 1 ORG 31710

(ORG(W) 31710)

=> s 15

546 ORG

20 31710

L7 1 ORG 31710

(ORG(W) 31710)

=> d 15

L5 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS

RN 118968-41-5 REGISTRY

CN Spiro[estra-4,9-diene-17,2' (3'H)-furan]-3-one, 11-[4-(dimethylamino)phenyl]-4',5'-dihydro-6-methyl-, (6.beta.,11.beta.,17.beta.)- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Spiro[17H-cyclopenta[a]phenanthrene-17,2' (3'H)-furan], spiro[estra-4,9-diene-17,2' (3'H)-furan]-3-one deriv.

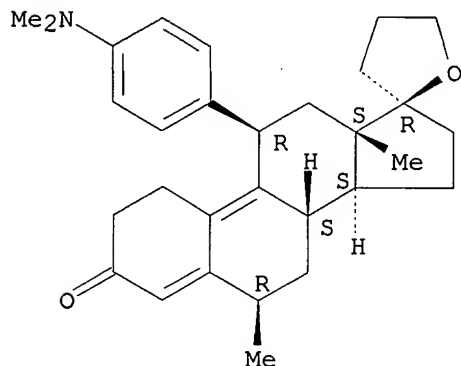
OTHER NAMES:

CN Org 31710

FS STEREOSEARCH

MF C30 H39 N O2  
 CI COM  
 SR CA  
 LC STN Files: ADISINSIGHT, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAPLUS,  
 CASREACT, CHEMINFORMRX, DDFU, DRUGNL, DRUGU, DRUGUPDATES, EMBASE,  
 MEDLINE, PHAR, TOXCENTER, USPAT2, USPATFULL

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

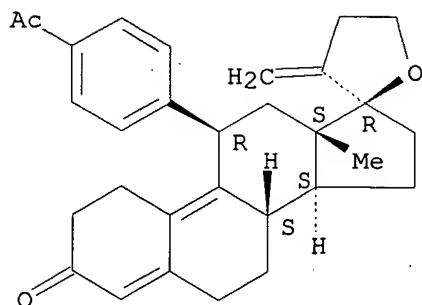
33 REFERENCES IN FILE CA (1962 TO DATE)  
 1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 33 REFERENCES IN FILE CAPLUS (1962 TO DATE)

=> s org 33628  
       546 ORG  
       18 33628  
 L8      1 ORG 33628  
           (ORG(W)33628)

=> d 18

L8 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS  
 RN 155768-17-5 REGISTRY  
 CN 19,24-Dinorchola-4,9,20-trien-3-one, 11-(4-acetylphenyl)-17,23-epoxy-,  
 (11.beta.,17.alpha.)- (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN Spiro[17H-cyclopenta[a]phenanthrene-17,2'(3'H)-furan],  
 19,24-dinorchola-4,9,20-trien-3-one deriv.  
 OTHER NAMES:  
 CN **Org 33628**  
 FS STEREOSEARCH  
 MF C30 H34 O3  
 SR CA  
 LC STN Files: BIOSIS, CA, CAPLUS, DRUGNL, DRUGUPDATES, TOXCENTER, USPATFULL

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

13 REFERENCES IN FILE CA (1962 TO DATE)  
13 REFERENCES IN FILE CAPLUS (1962 TO DATE)

=> s j 867

69368 J

1170 867

L9 1 J 867

(J(W)867)

=> d 19

L9 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS

RN 199396-76-4 REGISTRY

CN Benzaldehyde, 4-[(11.beta.,17.beta.)-17-methoxy-17-(methoxymethyl)-3-oxoestra-4,9-dien-11-yl]-, 1-oxime, [C(E)]- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN Asoprisnil

CN **J 867**

FS STEREOSEARCH

DR 222732-64-1

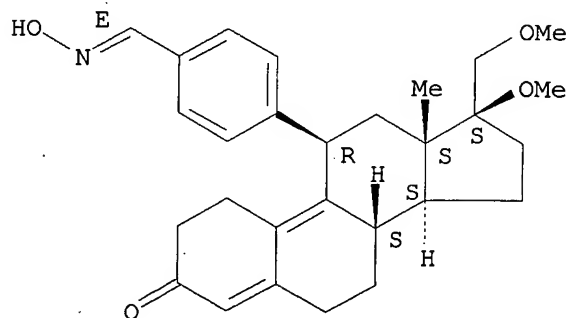
MF C28 H35 N O4

CI COM

SR CA

LC STN Files: ADISINSIGHT, CA, CAPLUS, CASREACT, DRUGUPDATES, PHAR, SYNTHLINE, TOXCENTER, USPATFULL

Absolute stereochemistry. Rotation (+).  
Double bond geometry as shown.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

15 REFERENCES IN FILE CA (1962 TO DATE)  
15 REFERENCES IN FILE CAPLUS (1962 TO DATE)

=> s cdb 2914

57 CDB  
534 2914

L10 1 CDB 2914  
(CDB(W)2914)

=> d 110

L10 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS

RN 126784-99-4 REGISTRY

CN 19-Norpregna-4,9-diene-3,20-dione, 17-(acetyloxy)-11-[4-(dimethylamino)phenyl]-, (11.beta.)- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN CDB 2914

CN RTI 3021-012

FS STEREOSEARCH

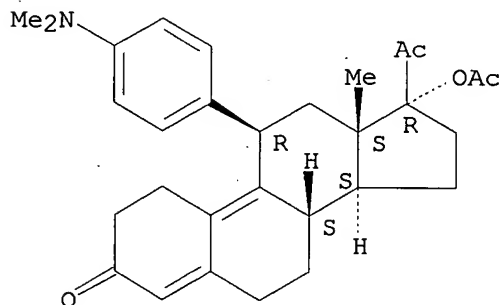
MF C30 H37 N O4

SR CA

LC STN Files: ADISINSIGHT, BEILSTEIN\*, BIOSIS, CA, CANCERLIT, CAPLUS, CASREACT, DRUGNL, DRUGUPDATES, MEDLINE, PROMT, SYNTHLINE, TOXCENTER, USPATFULL

(\*File contains numerically searchable property data)

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

23 REFERENCES IN FILE CA (1962 TO DATE)

23 REFERENCES IN FILE CAPLUS (1962 TO DATE)

=> s zk 137316

248 ZK  
2 137316

L11 1 ZK 137316  
(ZK(W)137316)

=> d 111

L11 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS

RN 198907-45-8 REGISTRY

CN ZK 137316 (9CI) (CA INDEX NAME)

ENTE A hormonal steroid; an antiprogestin

MF Unspecified

CI MAN  
SR CA  
LC STN Files: BIOSIS, CA, CAPLUS, DRUGNL, DRUGUPDATES, TOXCENTER, USPATFULL

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*  
12 REFERENCES IN FILE CA (1962 TO DATE)  
12 REFERENCES IN FILE CAPLUS (1962 TO DATE)

=> file caplus  
COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
94.74	94.95

FULL ESTIMATED COST

FILE 'CAPLUS' ENTERED AT 15:30:05 ON 16 APR 2003  
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FILE COVERS 1907 - 16 Apr 2003 VOL 138 ISS 16  
FILE LAST UPDATED: 15 Apr 2003 (20030415/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s nitric oxide synthase

130512 NITRIC  
1369614 OXIDE  
70286 SYNTHASE

L12 21216 NITRIC OXIDE SYNTHASE  
(NITRIC(W)OXIDE(W)SYNTHASE)

=> d his

(FILE 'HOME' ENTERED AT 15:25:42 ON 16 APR 2003)

FILE 'REGISTRY' ENTERED AT 15:25:51 ON 16 APR 2003

L1 4 S NAME  
L2 5 S MIFEPRISTONE  
L3 0 S ORG31710  
L4 0 S ORG 3171-  
L5 1 S ORG 31710  
L6 1 S L5  
L7 1 S L5  
L8 1 S ORG 33628  
L9 1 S J 867  
L10 1 S CDB 2914  
L11 1 S ZK 137316

FILE 'CAPLUS' ENTERED AT 15:30:05 ON 16 APR 2003



L12 21216 S NITRIC OXIDE SYNTHASE

=> s l1

L13 1379 L1

=> e fertility

E1	52	FERTILITIES/BI
E2	1	FERTILITY/BI
E3	27611 -->	FERTILITY/BI
E4	1	FERTILITYARE/BI
E5	1	FERTILITYDISTURBED/BI
E6	1	FERTILITZER/BI
E7	3	FERTILIY/BI
E8	8	FERTILIZ/BI
E9	4	FERTILIZA/BI
E10	174	FERTILIZABILITY/BI
E11	82	FERTILIZABLE/BI
E12	1	FERTILIZACION/BI

=> s e3

L14 27611 FERTILITY/BI

=> s l14 and l13

L15 6 L14 AND L13

=> d l15 1-6

L15 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2003 ACS

AN 2002:869589 CAPLUS

DN 137:346927

TI Implantation rates after in vitro fertilization, and treatment of infertility and early pregnancy loss with a nitric oxide donor or substrate alone or in combination with progesterone, and a method for contraception with nitric oxide inhibitors in combination with antiproggestins or other agents

IN Chwalisz, Krzysztof; Garfield, Robert E.

PA Germany

SO U.S. Pat. Appl. Publ., 15 pp., Division of U.S. Ser. No. 162,446.

CODEN: USXXCO

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	US 2002169205	A1	20021114	US 2002-43232	20020114
PRAI	US 1998-162446	A3	19980929		

L15 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2003 ACS

AN 2002:256294 CAPLUS

DN 136:295093

TI Preparation of peptides as melanocortin receptor ligands

IN Ebetino, Frank Hallock; Mazur, Adam W.; Hayes, Jeffrey Charles; Wang, Feng; Solinsky, Mark Gregory; Colson, Anny-odile; Lin, Qishen

PA Procter & Gamble Company, USA

SO PCT Int. Appl., 123 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	WO 2002026774	A2	20020404	WO 2001-US30051	20010926

W: AE, AG, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EC, EE, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRAI US 2000-235858P P 20000927

OS MARPAT 136:295093

L15 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2003 ACS

AN 2002:128843 CAPLUS

DN 137:199357

TI Growth and **fertility** rates in the offspring of pregnant rats treated with L-omega. nitro-L-arginine methyl ester (L-NAME), a nitric oxide inhibitor

AU Witlin, Andrea G.; Gangula, Pandu R. R.; Thompson, Mindy L.; Yallampalli, Chandra

CS Department of Obstetrics and Gynecology, Division of Maternal-Fetal Medicine and Division of Reproductive Sciences, The University of Texas Medical Branch at Galveston, Galveston, TX, 77555-1062, USA

SO American Journal of Obstetrics and Gynecology (2002), 186(1), 89-93  
CODEN: AJOGAH; ISSN: 0002-9378

PB Mosby, Inc.

DT Journal

LA English

RE.CNT 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2003 ACS

AN 2000:436227 CAPLUS

DN 133:291057

TI Reduction in libido and **fertility** of male rats by administration of the nitric oxide (NO) synthase inhibitor N-nitro-L-arginine methyl ester

AU Ratnasooriya, W. D.; Dharmasiri, M. G.; Wadsworth, R. M.

CS Department of Zoology, University of Colombo, Colombo, 3, Sri Lanka

SO International Journal of Andrology (2000), 23(3), 187-191  
CODEN: IJANDP; ISSN: 0105-6263

PB Blackwell Science Ltd.

DT Journal

LA English

RE.CNT 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2003 ACS

AN 1999:203927 CAPLUS

DN 131:39874

TI Synergistic role of nitric oxide and progesterone during the establishment of pregnancy in the rat

AU Chwalisz, Kristof; Winterhager, Elke; Thienel, Thomas; Garfield, Robert E.

CS Research Laboratories of Schering AG, Berlin, 13342, Germany

SO Human Reproduction (1999), 14(2), 542-552  
CODEN: HUREEE; ISSN: 0268-1161

PB Oxford University Press

DT Journal

LA English

RE.CNT 59 THERE ARE 59 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 6 OF 6 CAPLUS COPYRIGHT 2003 ACS  
 AN 1994:289794 CAPLUS  
 DN 120:289794  
 TI Effects of nitric oxide-related agents on rat testicular function  
 AU Adams, Michael L.; Meyer, Edward R.; Sewing, Bryan N.; Cicero, Theodore J.  
 CS Sch. Med., Washington Univ., St. Louis, MO, USA  
 SO Journal of Pharmacology and Experimental Therapeutics (1994), 269(1),  
 230-7  
 CODEN: JPETAB; ISSN: 0022-3565  
 DT Journal  
 LA English

=> d 115 6 all

L15 ANSWER 6 OF 6 CAPLUS COPYRIGHT 2003 ACS  
 AN 1994:289794 CAPLUS  
 DN 120:289794  
 TI Effects of nitric oxide-related agents on rat testicular function  
 AU Adams, Michael L.; Meyer, Edward R.; Sewing, Bryan N.; Cicero, Theodore J.  
 CS Sch. Med., Washington Univ., St. Louis, MO, USA  
 SO Journal of Pharmacology and Experimental Therapeutics (1994), 269(1),  
 230-7  
 CODEN: JPETAB; ISSN: 0022-3565  
 DT Journal  
 LA English  
 CC 1-8 (Pharmacology)  
 Section cross-reference(s): 2  
 AB The effects of nitric oxide (NO)-related agents on testicular function were examd. in male rats with measurements of serum LH, serum testosterone, testicular interstitial fluid (TIF) testosterone, and TIF vols. Serum and TIF testosterone levels and LH secretion were significantly decreased by the NO donor, isosorbide dinitrate (ISDN), and the NO synthase (NOS) substrate, L-arginine Me ester, a source for the endogenous prodn. of NO. The effects of ISDN on TIF vols. were inconsistent, but L-arginine Me ester decreased TIF formation in a dose-dependent manner. In addn., ISDN dose-dependently suppressed testosterone secretion stimulated by human chorionic gonadotropin treatment, suggesting that the effects on testosterone secretion were independent of changes in secretion of the endogenous gonadotropin LH. ISDN, L-arginine Me ester, and the endogenous NOS substrate L-arginine completely blocked testosterone secretion stimulated by the NOS inhibitor NG-nitro-L-arginine Me ester (NAME), whereas the relatively inactive NOS substrate, D-arginine, only partially blocked NAME-stimulated testosterone secretion. Hydralazine and nicardipine, two vasodilators that do not exhibit prominent NO-related effects, also blocked basal testosterone secretion and testosterone secretion stimulated by the vasoconstrictor NAME. These results suggest that (1) NO suppresses a major regulatory aspect of testicular function, testosterone secretion, (2) the stimulatory effects of the NOS inhibitor NAME on testosterone secretion are caused by NOS inhibition and a decrease in NO prodn., (3) the vasoactive effects of NO and NOS inhibitors, rather than direct steroidogenic effects, may mediate these effects on testicular function, and (4) arginine-NOS-NO pathways may play an important role in male reproductive endocrine function and **fertility**.  
 ST nitric oxide related agent testicular function  
 IT Testis  
 (function, nitric oxide-related agents effect on)  
 IT Vasodilators  
 (nitric oxide-related agents as, testicular function response to)  
 IT 10102-43-9, Nitric oxide, biological studies

RL: BIOL (Biological study)  
 (agents effect on, testicular function response to)  
 IT 125978-95-2, Nitric oxide synthase  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (inhibitor, testicular function response to, nitric oxide role in)  
 IT 58-22-0, Testosterone 9002-67-9, LH  
 RL: BIOL (Biological study)  
 (secretion, nitric oxide-related agents effect on)  
 IT 74-79-3, L-Arginine, biological studies 87-33-2, Isosorbide dinitrate  
 157-06-2, D-Arginine 2577-94-8, L-Arginine methyl ester  
**50903-99-6**  
 RL: BIOL (Biological study)  
 (testicular function response to, nitric oxide role in)

=> d his

(FILE 'HOME' ENTERED AT 15:25:42 ON 16 APR 2003)

FILE 'REGISTRY' ENTERED AT 15:25:51 ON 16 APR 2003

L1 4 S NAME  
 L2 5 S MIFEPRISTONE  
 L3 0 S ORG31710  
 L4 0 S ORG 3171-  
 L5 1 S ORG 31710  
 L6 1 S L5  
 L7 1 S L5  
 L8 1 S ORG 33628  
 L9 1 S J 867  
 L10 1 S CDB 2914  
 L11 1 S ZK 137316

FILE 'CAPLUS' ENTERED AT 15:30:05 ON 16 APR 2003

L12 21216 S NITRIC OXIDE SYNTHASE  
 L13 1379 S L1  
 E FERTILITY  
 L14 27611 S E3  
 L15 6 S L14 AND L13

=> s l14 and l12

L16 23 L14 AND L12

=> s l16 not l15

L17 18 L16 NOT L15

=> d l17 1-18

L17 ANSWER 1 OF 18 CAPLUS COPYRIGHT 2003 ACS  
 AN 2002:508556 CAPLUS  
 DN 137:195831  
 TI Deletion of exon 6 of the neuronal **nitric oxide**  
**synthase** gene in mice results in hypogonadism and infertility  
 AU Gyurko, Robert; Leupen, Sarah; Huang, Paul L.  
 CS Massachusetts General Hospital and Harvard Medical School, Boston, MA,  
 02129, USA  
 SO Endocrinology (2002), 143(7), 2767-2774  
 CODEN: ENDOAO; ISSN: 0013-7227  
 PB Endocrine Society  
 DT Journal  
 LA English  
 RE.CNT 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 2 OF 18 CAPLUS COPYRIGHT 2003 ACS  
 AN 2002:294227 CAPLUS  
 DN 136:315023  
 TI Polydithiocarbamate-containing nontargeting macromolecules for therapeutic and diagnostic applications  
 IN Lai, Ching-san  
 PA USA  
 SO U.S. Pat. Appl. Publ., 18 pp., Cont.-in-part of U.S. Ser. No. 899,087, abandoned.  
 CODEN: USXXCO  
 DT Patent  
 LA English  
 FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2002045573	A1	20020418	US 1999-409645	19991001
	CN 1230178	A	19990929	CN 1997-197797	19970828
	KR 2000035992	A	20000626	KR 1999-7001945	19990309
PRAI	US 1996-25867P	P	19960910		
	US 1997-899087	B2	19970723		
	US 1996-25867	A	19960910		
OS	MARPAT 136:315023				

L17 ANSWER 3 OF 18 CAPLUS COPYRIGHT 2003 ACS  
 AN 2002:179993 CAPLUS  
 DN 137:246002  
 TI **Nitric oxide synthase** and the function of sperm in varicocele patients  
 AU Zheng, Hang; Zheng, Xinmin; Li, Shiwen  
 CS Center of Urology and Andrology, Second Affiliated Hospital, Wuhan university, Wuhan, 430071, Peop. Rep. China  
 SO Zhongguo Nanxexue Zazhi (2001), 15(4), 239-241  
 CODEN: ZNZHA4; ISSN: 1008-0848  
 PB Shanghai Dier Yike Daxue  
 DT Journal  
 LA Chinese

L17 ANSWER 4 OF 18 CAPLUS COPYRIGHT 2003 ACS  
 AN 2001:577412 CAPLUS  
 DN 136:303868  
 TI L-arginine, the substrate of **nitric oxide synthase**, inhibits **fertility** of male rats  
 AU Ratnasooriya, W. D.; Dharmasiri, M. G.  
 CS Department of Zoology, University of Colombo, Colombo, 3, Sri Lanka  
 SO Asian Journal of Andrology (2001), 3(2), 97-103  
 CODEN: ASJAF8; ISSN: 1008-682X  
 PB Science Press  
 DT Journal  
 LA English

RE.CNT 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 5 OF 18 CAPLUS COPYRIGHT 2003 ACS  
 AN 2001:121007 CAPLUS  
 DN 135:75223  
 TI Expression of endothelial **nitric oxide synthase** in the Sertoli cells of men with infertility of various causes  
 AU Fujisawa, M.; Yamanaka, K.; Tanaka, H.; Tanaka, H.; Okada, H.; Arakawa, S.; Kamidono, S.  
 CS Department of Urology, Kobe University School of Medicine, Kobe, Japan

SO BJU International (2001), 87(1), 85-88  
CODEN: BJINFO; ISSN: 1464-4096  
PB Blackwell Science Ltd.  
DT Journal  
LA English  
RE.CNT 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 6 OF 18 CAPLUS COPYRIGHT 2003 ACS  
AN 2001:11841 CAPLUS  
DN 134:113686  
TI Nitric oxide in human sperm  
AU Lewis, Sheena E. M.  
CS Department of Obstetrics and Gynaecology, The Queen's University of  
Belfast, Belfast, UK  
SO Assisted Reproduction Reviews (1998), 8(2), 58-64  
CODEN: AEPEEJ; ISSN: 1051-2446  
PB Decker Periodicals  
DT Journal  
LA English  
RE.CNT 78 THERE ARE 78 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 7 OF 18 CAPLUS COPYRIGHT 2003 ACS  
AN 2000:774625 CAPLUS  
DN 134:40627  
TI Inducible **nitric oxide synthase** in the rat  
testis: Evidence for potential roles in both normal function and  
inflammation-mediated infertility  
AU O'Bryan, Moira K.; Schlatt, Stefan; Gerdprasert, Orapin; Phillips, David  
J.; de Kretser, David; Hedger, Mark P.  
CS Monash Inst. Reproduction and Development, Monash Univ., Clayton, 3168,  
Australia  
SO Biology of Reproduction (2000), 63(5), 1285-1293  
CODEN: BIREBV; ISSN: 0006-3363  
PB Society for the Study of Reproduction  
DT Journal  
LA English  
RE.CNT 48 THERE ARE 48 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 8 OF 18 CAPLUS COPYRIGHT 2003 ACS  
AN 2000:311908 CAPLUS  
DN 133:87259  
TI Activation of platelet-activating factor (PAF) receptor stimulates nitric  
oxide (NO) release via protein kinase C-.alpha. in HEC-1B human  
endometrial epithelial cell line  
AU Dearn, Sharon; Rahman, Mabhub; Lewis, Aurelia; Ahmed, Zahra; Eggo,  
Margaret C.; Ahmed, Asif  
CS Department of Reproductive and Vascular Biology, Division of Reproductive  
and Child Health, Birmingham Women's Hospital, University of Birmingham,  
Birmingham, B15 2TG, UK  
SO Molecular Medicine (New York) (2000), 6(1), 37-49  
CODEN: MOMEF3; ISSN: 1076-1551  
PB Johns Hopkins University Press  
DT Journal  
LA English  
RE.CNT 44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 9 OF 18 CAPLUS COPYRIGHT 2003 ACS  
AN 1999:819234 CAPLUS

DN 132:59191  
TI Therapeutic methods employing disulfide derivatives of dithiocarbamates  
and compositions useful therefor  
IN Lai, Ching-San; Vassilev, Vassil  
PA Medinox, Inc., USA  
SO PCT Int. Appl., 102 pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9966918	A1	19991229	WO 1999-US14237	19990622
	W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
	US 6093743	A	20000725	US 1998-103639	19980623
	CA 2335858	AA	19991229	CA 1999-2335858	19990622
	AU 9947119	A1	20000110	AU 1999-47119	19990622
	EP 1089723	A1	20010411	EP 1999-930617	19990622
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI			
	JP 2002518441	T2	20020625	JP 2000-555604	19990622
	US 6316502	B1	20011113	US 2000-565666	20000505
PRAI	US 1998-103639	A2	19980623		
	WO 1999-US14237	W	19990622		

OS MARPAT 132:59191

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 10 OF 18 CAPLUS COPYRIGHT 2003 ACS

AN 1999:678176 CAPLUS

DN 132:48170

TI Reproductive Function in Female Mice Lacking the Gene for Endothelial  
**Nitric Oxide Synthase**

AU Drazen, Deborah L.; Klein, Sabra L.; Burnett, Arthur L.; Wallach, Edward  
E.; Crone, Julie K.; Huang, Paul L.; Nelson, Randy J.

CS Behavioral Neuroendocrinology Group, Departments of Psychology and  
Neuroscience, Johns Hopkins University, Baltimore, MD, 21218, USA

SO Nitric Oxide (1999), 3(5), 366-374

CODEN: NIOXF5; ISSN: 1089-8603

PB Academic Press

DT Journal

LA English

RE.CNT 47 THERE ARE 47 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 11 OF 18 CAPLUS COPYRIGHT 2003 ACS

AN 1999:447987 CAPLUS

DN 131:255383

TI Reduced tolerance to acute renal ischemia in mice with a targeted  
disruption of the osteopontin gene

AU Noiri, Eisei; Dickman, Kate; Miller, Frederick; Romanov, Galina; Romanov,  
Victor I.; Shaw, Robert; Chambers, Ann F.; Rittling, Susan R.; Denhardt,  
David T.; Goligorsky, Michael S.

CS Department of Medicine, The University of Tokyo, Tokyo, Japan

SO Kidney International (1999), 56(1), 74-82  
 CODEN: KDYIA5; ISSN: 0085-2538  
 PB Blackwell Science, Inc.  
 DT Journal  
 LA English  
 RE.CNT 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 12 OF 18 CAPLUS COPYRIGHT 2003 ACS  
 AN 1998:788750 CAPLUS  
 DN 130:33045  
 TI Method using a nitric oxide scavenger for in vivo reduction of nitric  
 oxide levels, and compositions useful therefor  
 IN Lai, Ching-San  
 PA MCW Research Foundation, USA  
 SO U.S., 20 pp., Cont.-in-part of U.S. Ser. No. 554,196.  
 CODEN: USXXAM  
 DT Patent  
 LA English  
 FAN.CNT 5

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5847004	A	19981208	US 1996-767125	19961209
	US 5756540	A	19980526	US 1995-459518	19950602
	US 5741815	A	19980421	US 1995-554196	19951106
	US 6469057	B1	20021022	US 2000-672140	20000927
	US 2003040511	A1	20030227	US 2002-267528	20021008
PRAI	US 1995-459518	A2	19950602		
	US 1995-554196	A2	19951106		
	US 1996-767125	A2	19961209		
	US 1997-863059	B2	19970523		
	US 2000-672140	A3	20000927		

RE.CNT 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 13 OF 18 CAPLUS COPYRIGHT 2003 ACS  
 AN 1998:755828 CAPLUS  
 DN 130:151457  
 TI Impaired ovulation in mice with targeted deletion of the neuronal isoform  
 of **nitric oxide synthase**  
 AU Klein, Sabra L.; Carnovale, David; Burnett, Arthur L.; Wallach, Edward E.;  
 Zacur, Howard A.; Crone, Julie K.; Dawson, Valina L.; Nelson, Randy J.;  
 Dawson, Ted M.  
 CS Behavioral Neuroendocrinology Group, Department of Psychology, Johns  
 Hopkins University, Baltimore, MD, USA  
 SO Molecular Medicine (New York) (1998), 4(10), 658-664  
 CODEN: MOMEF3; ISSN: 1076-1551  
 PB Springer-Verlag New York Inc.  
 DT Journal  
 LA English

RE.CNT 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 14 OF 18 CAPLUS COPYRIGHT 2003 ACS  
 AN 1998:370682 CAPLUS  
 DN 129:118187  
 TI Chronic blockade of **nitric oxide-synthase**  
 and endothelin receptors during pregnancy in the rat: effect on pregnancy  
 outcome  
 AU Wight, Edward; Kung, Christoph F.; Moreau, Pierre; Takase, Hiroyuki;  
 Luscher, Thomas F.  
 CS Department of Obstetrics and Gynecology, University Hospital Zurich,



Zurich, CH-8091, Switz.

SO Journal of the Society for Gynecologic Investigation (1998), 5(3), 132-139  
CODEN: JSGIED; ISSN: 1071-5576  
PB Elsevier Science Inc.  
DT Journal  
LA English  
RE.CNT 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 15 OF 18 CAPLUS COPYRIGHT 2003 ACS

AN 1998:180841 CAPLUS

DN 128:239488

TI Polydithiocarbamate-containing macromolecules and the use thereof for  
therapeutic and diagnostic applications

IN Lai, Ching-San

PA Medinox, Inc., USA; Lai, Ching-San

SO PCT Int. Appl., 68 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9811066	A1	19980319	WO 1997-US15324	19970828
	W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG			
	AU 9741725	A1	19980402	AU 1997-41725	19970828
	AU 746790	B2	20020502		
	EP 927159	A1	19990707	EP 1997-939694	19970828
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI			
	CN 1230178	A	19990929	CN 1997-197797	19970828
	JP 2002511837	T2	20020416	JP 1998-513688	19970828
	KR 2000035992	A	20000626	KR 1999-7001945	19990309
PRAI	US 1996-25867P	P	19960910		
	US 1997-899087	A2	19970723		
	US 1996-25867	A	19960910		
	WO 1997-US15324	W	19970828		

OS MARPAT 128:239488

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 16 OF 18 CAPLUS COPYRIGHT 2003 ACS

AN 1997:745947 CAPLUS

DN 128:19047

TI Improvement of implantation rates after in vitro fertilization by  
administering a nitric oxide substrate and/or donor

IN Chwalsz, Krzysztof; Garfield, Robert E.

PA Schering Aktiengesellschaft, Germany

SO PCT Int. Appl., 38 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI WO 9741866 A1 19971113 WO 1997-EP2371 19970507  
W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM  
RW: GH, KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG  
US 6040340 A 20000321 US 1996-646518 19960507  
AU 9728947 A1 19971126 AU 1997-28947 19970507  
EP 906105 A1 19990407 EP 1997-923032 19970507  
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI  
CN 1218402 A 19990602 CN 1997-194452 19970507  
BR 9708980 A 19990803 BR 1997-8980 19970507  
JP 2000510462 T2 20000815 JP 1997-539553 19970507  
NO 9805204 A 19990106 NO 1998-5204 19981106  
KR 2000010833 A 20000225 KR 1998-708974 19981106  
PRAI US 1996-646518 A 19960507  
WO 1997-EP2371 W 19970507

L17 ANSWER 17 OF 18 CAPLUS COPYRIGHT 2003 ACS  
AN 1996:324262 CAPLUS  
DN 125:54130  
TI The immunohistochemical localization of **nitric oxide synthase** (NOS) in the human male reproductive tract and in spermatozoa, suggests a possible role for nitric oxide in spermatogenesis and sperm maturation and an association with subfertility.  
AU Zini, Armand; O'Bryan, Moira K.; Magid, Margaret; Schlegel, Peter N.  
CS Department Urology, James Buchanan Brady Foundation, New York, NY, 10021, USA  
SO Portland Press Proceedings (1996), 10(Biology of Nitric Oxide Part 5), 19  
CODEN: POPPEF; ISSN: 0966-4068  
PB Portland Press  
DT Journal  
LA English

L17 ANSWER 18 OF 18 CAPLUS COPYRIGHT 2003 ACS  
AN 1995:688648 CAPLUS  
DN 123:80417  
TI **Nitric oxide synthase** in the rat fallopian tube is regulated during the estrous cycle  
AU Bryant, C. E.; Tomlinson, A.; Mitchell, J. A.; Thiemermann, C.; Willoughby, D. A.  
CS Dep. Exp. Pathol., Med. Coll. St. Bartholomew's Hosp., London, EC1M 6BQ, UK  
SO Journal of Endocrinology (1995), 146(1), 149-57  
CODEN: JOENAK; ISSN: 0022-0795  
PB Journal of Endocrinology  
DT Journal  
LA English

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L17 ANSWER 12 OF 18 CAPLUS COPYRIGHT 2003 ACS  
AN 1998:788750 CAPLUS  
DN 130:33045  
TI Method using a nitric oxide scavenger for in vivo reduction of nitric oxide levels, and compositions useful therefor  
IN Lai, Ching-San

PA MCW Research Foundation, USA  
 SO U.S., 20 pp., Cont.-in-part of U.S. Ser. No. 554,196.  
 CODEN: USXXAM  
 DT Patent  
 LA English  
 IC ICM A01N037-18  
 NCL 514599000  
 CC 1-12 (Pharmacology)  
 Section cross-reference(s): 63  
 FAN.CNT 5

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5847004	A	19981208	US 1996-767125	19961209
	US 5756540	A	19980526	US 1995-459518	19950602
	US 5741815	A	19980421	US 1995-554196	19951106
	US 6469057	B1	20021022	US 2000-672140	20000927
	US 2003040511	A1	20030227	US 2002-267528	20021008
PRAI	US 1995-459518	A2	19950602		
	US 1995-554196	A2	19951106		
	US 1996-767125	A2	19961209		
	US 1997-863059	B2	19970523		
	US 2000-672140	A3	20000927		

AB Methods are provided for the in vivo redn. of nitric oxide levels in a mammalian subject. In contrast to the inhibitory approach described in the prior art (i.e., wherein the function of the enzymes responsible for nitric oxide prodn. is inhibited), the present invention employs a scavenging approach whereby overproduced nitric oxide is bound in vivo to a suitable nitric oxide scavenger. The resulting complex renders the nitric oxide harmless, and is eventually excreted in the urine of the host. An exemplary nitric oxide scavenger contemplated for use in the practice of the present invention is a dithiocarbamate-ferrous iron complex. This complex binds to .NO, forming a stable, water-sol. NO-contg. complex having a characteristic three-line spectrum (indicative of a mononitrosyl-Fe complex) which can readily be detected at ambient temps. by EPR spectroscopy. The invention relates to methods for reducing in vivo levels of .NO as a means of treating subjects afflicted with inflammatory and/or infectious disease. Nitric oxide scavengers are administered to a host in need of such treatment; these scavengers interact with in vivo produced .NO, forming a stable NO-contg. complex. The NO-contg. complex is then filtered through the kidneys, concd. in the urine, and eventually excreted by the subject, thereby reducing in vivo .NO levels.

ST nitric oxide scavenger therapeutic

IT AIDS (disease)

(AIDS dementia complex, nitric oxide overprod. assocd. with; nitric oxide scavenger for in vivo redn. of nitric oxide level)

IT Mental disorder

(AIDS dementia, nitric oxide overprod. assocd. with; nitric oxide scavenger for in vivo redn. of nitric oxide level)

IT Intestine, disease

(Crohn's, nitric oxide overprod. assocd. with; nitric oxide scavenger for in vivo redn. of nitric oxide level)

IT Nervous system

(Huntington's chorea, nitric oxide overprod. assocd. with; nitric oxide scavenger for in vivo redn. of nitric oxide level)

IT Respiratory distress syndrome

(adult, nitric oxide overprod. assocd. with; nitric oxide scavenger for in vivo redn. of nitric oxide level)

IT Transplant rejection

(allotransplant, nitric oxide overprod. assocd. with; nitric oxide scavenger for in vivo redn. of nitric oxide level)

IT Nervous system

(amyotrophic lateral sclerosis, nitric oxide overprod. assocd. with; nitric oxide scavenger for in vivo redn. of nitric oxide level)

IT Nervous system  
Nervous system  
(central, trauma, nitric oxide overprod. assocd. with; nitric oxide scavenger for in vivo redn. of nitric oxide level)

IT Fatigue, biological  
(chronic fatigue syndrome, nitric oxide overprod. assocd. with; nitric oxide scavenger for in vivo redn. of nitric oxide level)

IT Pain  
(chronic, nitric oxide overprod. assocd. with; nitric oxide scavenger for in vivo redn. of nitric oxide level)

IT Nervous system  
(degeneration, nitric oxide overprod. assocd. with; nitric oxide scavenger for in vivo redn. of nitric oxide level)

IT Mental disorder  
(depression, nitric oxide overprod. assocd. with; nitric oxide scavenger for in vivo redn. of nitric oxide level)

IT Gastrointestinal motility  
(disorder, dysmotility, dysmotility, nitric oxide overprod. assocd. with; nitric oxide scavenger for in vivo redn. of nitric oxide level)

IT Sexual behavior  
(disorder, priapism, nitric oxide overprod. assocd. with; nitric oxide scavenger for in vivo redn. of nitric oxide level)

IT Drug delivery systems  
(emulsions; nitric oxide scavenger for in vivo redn. of nitric oxide level)

IT **Fertility**  
(enhancement, nitric oxide overprod. assocd. with; nitric oxide scavenger for in vivo redn. of nitric oxide level)

IT Heart, disease  
Kidney, disease  
(failure, nitric oxide overprod. assocd. with; nitric oxide scavenger for in vivo redn. of nitric oxide level)

IT Stomach, disease  
(gastritis, nitric oxide overprod. assocd. with; nitric oxide scavenger for in vivo redn. of nitric oxide level)

IT Kidney, disease  
(glomerulonephritis, nitric oxide overprod. assocd. with; nitric oxide scavenger for in vivo redn. of nitric oxide level)

IT Transplant and Transplantation  
(graft-vs.-host reaction, nitric oxide overprod. assocd. with; nitric oxide scavenger for in vivo redn. of nitric oxide level)

IT Neoplasm  
(hematol., nitric oxide overprod. assocd. with; nitric oxide scavenger for in vivo redn. of nitric oxide level)

IT Dialysis  
(hemodialysis, nitric oxide overprod. assocd. with; nitric oxide scavenger for in vivo redn. of nitric oxide level)

IT Shock (circulatory collapse)  
(hemorrhagic, nitric oxide overprod. assocd. with; nitric oxide scavenger for in vivo redn. of nitric oxide level)

IT Appetite  
(hyperphagia, nitric oxide overprod. assocd. with; nitric oxide scavenger for in vivo redn. of nitric oxide level)

IT Intestine, disease  
(ileitis, nitric oxide overprod. assocd. with; nitric oxide scavenger for in vivo redn. of nitric oxide level)

IT Intestine  
(ileum, disease, ileitis, nitric oxide overprod. assocd. with; nitric oxide scavenger for in vivo redn. of nitric oxide level)

IT Liver, disease

Liver, disease  
(inflammation, nitric oxide overprod. assocd. with; nitric oxide scavenger for in vivo redn. of nitric oxide level)

IT Intestine, disease  
(inflammatory, nitric oxide overprod. assocd. with; nitric oxide scavenger for in vivo redn. of nitric oxide level)

IT Drug delivery systems  
(inhalants; nitric oxide scavenger for in vivo redn. of nitric oxide level)

IT Drug delivery systems  
(injections, i.v.; nitric oxide scavenger for in vivo redn. of nitric oxide level)

IT Drug delivery systems  
(injections, s.c.; nitric oxide scavenger for in vivo redn. of nitric oxide level)

IT Head

Lung, disease

Reperfusion  
(injury, nitric oxide overprod. assocd. with; nitric oxide scavenger for in vivo redn. of nitric oxide level)

IT Brain, disease  
(ischemia, nitric oxide overprod. assocd. with; nitric oxide scavenger for in vivo redn. of nitric oxide level)

IT Drug delivery systems  
(liposomes; nitric oxide scavenger for in vivo redn. of nitric oxide level)

IT Drug delivery systems  
(liqs., dispersions; nitric oxide scavenger for in vivo redn. of nitric oxide level)

IT Drugs  
(lung injury induced by, nitric oxide overprod. assocd. with; nitric oxide scavenger for in vivo redn. of nitric oxide level)

IT Meningitis  
(lymphocytic choriomeningitis, nitric oxide overprod. assocd. with; nitric oxide scavenger for in vivo redn. of nitric oxide level)

IT Headache  
(migraine, nitric oxide overprod. assocd. with; nitric oxide scavenger for in vivo redn. of nitric oxide level)

IT Myeloproliferative disorders  
(myelofibrosis, nitric oxide overprod. assocd. with; nitric oxide scavenger for in vivo redn. of nitric oxide level)

IT Heart, disease  
(myocarditis, nitric oxide overprod. assocd. with; nitric oxide scavenger for in vivo redn. of nitric oxide level)

IT Kidney, disease  
(nephritis, nitric oxide overprod. assocd. with; nitric oxide scavenger for in vivo redn. of nitric oxide level)

IT AIDS (disease)

Alzheimer's disease

Anaphylaxis

Anxiety

Arthritis

Asthma

Atherosclerosis

Autoimmune disease

Burn

Cachexia

Cardiopulmonary bypass

Cirrhosis

Cystic fibrosis

Dermatitis

Diabetes mellitus

Drug dependence

Eczema

Encephalomyelitis

Epilepsy

Heart, disease

Hepatitis

Infection

Inflammation

Ischemia

Liver, disease

Malaria

Meningitis

Multiple sclerosis

Neoplasm

Obesity

Parkinson's disease

Psoriasis

Schizophrenia

Transplant rejection

Ulcer

Urticaria

(nitric oxide overprodn. assocd. with; nitric oxide scavenger for in vivo redn. of nitric oxide level)

IT Cytokines

RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(nitric oxide overprodn. assocd. with; nitric oxide scavenger for in vivo redn. of nitric oxide level)

IT Interleukin 1

Interleukin 12

Interleukin 2

Interleukin 6

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(nitric oxide overprodn. assocd. with; nitric oxide scavenger for in vivo redn. of nitric oxide level)

IT Interferons

Interleukins

Tumor necrosis factors

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(nitric oxide overprodn. assocd. with; nitric oxide scavenger for in vivo redn. of nitric oxide level)

IT Micelles

Scavengers

Spin trapping

(nitric oxide scavenger for in vivo redn. of nitric oxide level)

IT Lipopolysaccharides

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(nitric oxide scavenger for in vivo redn. of nitric oxide level)

IT Antibiotics

Cardiovascular agents

(nitric oxide scavenger for in vivo redn. of nitric oxide level, and combination use)

IT Catecholamines, biological studies

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(nitric oxide scavenger for in vivo redn. of nitric oxide level, and

combination use)

IT Drug delivery systems  
(oral; nitric oxide scavenger for in vivo redn. of nitric oxide level)

IT Pancreas, disease  
(pancreatitis, nitric oxide overprodn. assocd. with; nitric oxide scavenger for in vivo redn. of nitric oxide level)

IT Drug delivery systems  
(parenterals; nitric oxide scavenger for in vivo redn. of nitric oxide level)

IT Peritoneum  
(peritonitis, nitric oxide overprodn. assocd. with; nitric oxide scavenger for in vivo redn. of nitric oxide level)

IT Ovarian cycle  
(premenstrual syndrome, nitric oxide overprodn. assocd. with; nitric oxide scavenger for in vivo redn. of nitric oxide level)

IT Transplant and Transplantation  
(preservation, nitric oxide overprodn. assocd. with; nitric oxide scavenger for in vivo redn. of nitric oxide level)

IT Drug delivery systems  
(rectal; nitric oxide scavenger for in vivo redn. of nitric oxide level)

IT Shock (circulatory collapse)  
(septic, nitric oxide overprodn. assocd. with; nitric oxide scavenger for in vivo redn. of nitric oxide level)

IT Neoplasm  
(solid, nitric oxide overprodn. assocd. with; nitric oxide scavenger for in vivo redn. of nitric oxide level)

IT Drug delivery systems  
(solids; nitric oxide scavenger for in vivo redn. of nitric oxide level)

IT Drug delivery systems  
(solns.; nitric oxide scavenger for in vivo redn. of nitric oxide level)

IT Brain, disease  
(stroke, nitric oxide overprodn. assocd. with; nitric oxide scavenger for in vivo redn. of nitric oxide level)

IT Lupus erythematosus  
(systemic, nitric oxide overprodn. assocd. with; nitric oxide scavenger for in vivo redn. of nitric oxide level)

IT Shock (circulatory collapse)  
(toxic shock syndrome, nitric oxide overprodn. assocd. with; nitric oxide scavenger for in vivo redn. of nitric oxide level)

IT Intestine, disease  
(ulcerative colitis, nitric oxide overprodn. assocd. with; nitric oxide scavenger for in vivo redn. of nitric oxide level)

IT Eye, disease  
(uveitis, nitric oxide overprodn. assocd. with; nitric oxide scavenger for in vivo redn. of nitric oxide level)

IT Blood vessel, disease  
(vasculitis, nitric oxide overprodn. assocd. with; nitric oxide scavenger for in vivo redn. of nitric oxide level)

IT Interferons  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)  
(.gamma., nitric oxide overprodn. assocd. with; nitric oxide scavenger for in vivo redn. of nitric oxide level)

IT 160525-37-1  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(nitric oxide scavenger for in vivo redn. of nitric oxide level)

IT 151268-43-8

RL: BOC (Biological occurrence); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence); PROC (Process)

(nitric oxide scavenger for in vivo redn. of nitric oxide level)

IT 74-79-3, L-Arginine, biological studies 125978-95-2, **Nitric oxide synthase**

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(nitric oxide scavenger for in vivo redn. of nitric oxide level)

IT 10102-43-9, Nitric oxide, biological studies

RL: BPR (Biological process); BSU (Biological study, unclassified); MFM (Metabolic formation); BIOL (Biological study); FORM (Formation, nonpreparative); PROC (Process)

(nitric oxide scavenger for in vivo redn. of nitric oxide level)

IT 51-41-2, Noradrenaline 51-61-6, Dopamine, biological studies 34368-04-2, Dobutamine

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(nitric oxide scavenger for in vivo redn. of nitric oxide level, and combination use)

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L17 ANSWER 13 OF 18 CAPLUS COPYRIGHT 2003 ACS

AN 1998:755828 CAPLUS

DN 130:151457

TI Impaired ovulation in mice with targeted deletion of the neuronal isoform of **nitric oxide synthase**

AU Klein, Sabra L.; Carnovale, David; Burnett, Arthur L.; Wallach, Edward E.; Zacur, Howard A.; Crone, Julie K.; Dawson, Valina L.; Nelson, Randy J.; Dawson, Ted M.

CS Behavioral Neuroendocrinology Group, Department of Psychology, Johns Hopkins University, Baltimore, MD, USA



SO Molecular Medicine (New York) (1998), 4(10), 658-664  
 CODEN: MOMEF3; ISSN: 1076-1551

PB Springer-Verlag New York Inc.  
 DT Journal  
 LA English  
 CC 13-6 (Mammalian Biochemistry)  
 Section cross-reference(s): 14

AB Background: Nitric oxide (NO) plays an important role in numerous reproductive processes. To date, most studies have assessed the role of NO by using nonspecific pharmacol. inhibitors of the precursor to NO, **nitric oxide synthase** (NOS). These pharmacol. NOS inhibitors suppress all isoforms of NOS; thus, the precise contribution of each isoform to female reproductive physiolo. is unknown. The purpose of this study was to det. the specific role of neuronal NOS (nNOS) in the regulation of ovulation in female mice lacking the gene that encodes for nNOS (nNOS-/-). Materials and Methods: Ovulation was assessed in wild-type (WT) and nNOS-/- female mice by examg. the no. of ovarian rupture sites and no. of oocytes recovered from the oviducts following mating or exposure to exogenous gonadotropins (i.e., 5 IU pregnant mares serum gonadotropin [PMSG] and 5 IU human chorionic gonadotropin [hCG]). Ovulatory efficiency was detd. as the no. of ovulated oocytes per no. of ovarian rupture sites. To examine whether ovulatory deficits in nNOS-/- mice were due to alterations in central mechanisms, plasma LH concns. were assessed in WT and nNOS-/- mice that were challenged with 25 ng of gonadotropin-releasing hormone (GnRH). To det. whether ovulatory deficits in nNOS-/- mice were due to local ovulation processes, nerves innervating the reproductive tract of WT and nNOS-/- females were examd. for the presence of nNOS protein. Results: There were substantial **fertility** deficits in nNOS-/- female mice; the nNOS-/- mice had fewer oocytes in their oviducts following spontaneous and gonadotropin-stimulated ovulation. Pituitary responsiveness to exogenous GnRH challenge was intact in nNOS-/- mice. Dense nNOS protein staining was obsd. in nerves innervating the reproductive tracts of WT mice. Conclusions: The reproductive deficits in nNOS-/- females are most likely due to alterations in the transfer of oocytes from the ovaries to the oviducts during ovulation. These results suggest that defects in neuronally derived NO prodn. may contribute to female infertility.

ST **nitric oxide synthase** ovulation infertility  
 IT Mutation  
 (deletion; impaired ovulation in mice with targeted deletion of neuronal isoform of **nitric oxide synthase**)

IT **Fertility**  
**Fertility**  
 (female, disorder; impaired ovulation in mice with targeted deletion of neuronal isoform of **nitric oxide synthase**)

IT Ovulation  
 (impaired ovulation in mice with targeted deletion of neuronal isoform of **nitric oxide synthase**)

IT 10102-43-9, Nitric oxide, biological studies  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (impaired ovulation in mice with targeted deletion of neuronal isoform of **nitric oxide synthase**)

IT 125978-95-2, **Nitric oxide synthase**  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)  
 (neuronal isoform; impaired ovulation in mice with targeted deletion of neuronal isoform of **nitric oxide synthase**)

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L17 ANSWER 14 OF 18 CAPLUS COPYRIGHT 2003 ACS

AN 1998:370682 CAPLUS

DN 129:118187

TI Chronic blockade of **nitric oxide-synthase**  
and endothelin receptors during pregnancy in the rat: effect on pregnancy outcome

AU Wight, Edward; Kung, Christoph F.; Moreau, Pierre; Takase, Hiroyuki;  
Luscher, Thomas F.

CS Department of Obstetrics and Gynecology, University Hospital Zurich,  
Zurich, CH-8091, Switz.

SO Journal of the Society for Gynecologic Investigation (1998), 5(3), 132-139  
CODEN: JSGIED; ISSN: 1071-5576

PB Elsevier Science Inc.

DT Journal

LA English

CC 2-10 (Mammalian Hormones)

AB To investigate the effects of endothelin-1 (ET-1) receptor antagonism and/or chronic blockade of nitric oxide (NO) prodn. on pregnancy outcome in the rat. Pregnant or nonpregnant Wistar rats were either treated orally for up to 18 days with the NO-synthase inhibitor N.omega.-nitro-L-arginine Me ester (L-NAME), the ETA-/ETB-receptor antagonist bosentan or both, or received no treatment (controls). Blood pressure, body wt., and drug intake were measured at regular intervals. Pregnancy outcome and proteinuria were also detd. Anal. of variance and paired Student t test were used for statistical anal. Chronic L-NAME treatment increased systolic blood pressure by 69 and 64 mmHg in pregnant and virgin rats resp. Bosentan-blunted, L-NAME-induced hypertension at the beginning, but not at the end of the treatment period in all rats examd. N.omega.-nitro-L-arginine Me ester-treatment in pregnancy reduced the no. of living fetuses at term and caused proteinuria. Bosentan tended to reverse the effects of L-NAME on fetus no. and proteinuria, but both effects failed to reach statistical significance. The effects of chronic

NO-synthase-blockade on blood pressure in gravid rats can be reversed only temporarily by ETA-/ETB-antagonism, suggesting an involvement of endothelin-1 in the early phase of the L-NAME-induced, preeclampsia-like syndrome during pregnancy, although at later stages other mechanisms may come into play.

ST pregnancy nitric oxide endothelin receptor

IT **Fertility**

(female; **nitric oxide-synthase** and endothelin receptor chronic blockade effect on pregnancy outcome in rats)

IT Pregnancy

(**nitric oxide-synthase** and endothelin receptor chronic blockade effect on pregnancy outcome in rats)

IT Endothelin receptors

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(**nitric oxide-synthase** and endothelin receptor chronic blockade effect on pregnancy outcome in rats)

IT 10102-43-9, Nitric oxide, biological studies 123626-67-5, Endothelin-1

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(**nitric oxide-synthase** and endothelin receptor chronic blockade effect on pregnancy outcome in rats)

IT 116243-73-3, Endothelin 125978-95-2, **Nitric oxide**

**synthase**

RL: BSU (Biological study, unclassified); BIOL (Biological study)

(**nitric oxide-synthase** and endothelin receptor chronic blockade effect on pregnancy outcome in rats)

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L17 ANSWER 15 OF 18 CAPLUS COPYRIGHT 2003 ACS

AN 1998:180841 CAPLUS

DN 128:239488

TI Polydithiocarbamate-containing macromolecules and the use thereof for therapeutic and diagnostic applications

IN Lai, Ching-San

PA Medinox, Inc., USA; Lai, Ching-San

SO PCT Int. Appl., 68 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM C07C333-14

CC 1-12 (Pharmacology)

Section cross-reference(s): 8

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	WO 9811066	A1	19980319	WO 1997-US15324	19970828
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	AU 9741725	A1	19980402	AU 1997-41725	19970828
	AU 746790	B2	20020502		
	EP 927159	A1	19990707	EP 1997-939694	19970828
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	CN 1230178	A	19990929	CN 1997-197797	19970828
	JP 2002511837	T2	20020416	JP 1998-513688	19970828
	KR 2000035992	A	20000626	KR 1999-7001945	19990309
PRAI	US 1996-25867P	P	19960910		
	US 1997-899087	A2	19970723		
	US 1996-25867	A	19960910		
	WO 1997-US15324	W	19970828		

OS MARPAT 128:239488

AB A new class of drugs is provided for therapeutic treatment of such indications as cerebral stroke and other ischemia/reperfusion injury. Dithiocarbamates are linked to the surface of a macromol. (e.g. albumin), either by using crosslinking reagents or by non-specific binding, to produce polydithiocarbamate-macromol.-contg. compns. Combination therapeutic methods have been developed for the in vivo inactivation or inhibition of formation (either directly or indirectly) of species which induce the expression of inducible **nitric oxide synthase**, as well as reducing nitric oxide levels produced as a result of NO synthase expression. Magnetic resonance imaging methods have been developed for the measurement of cerebral and cardiac blood flow and infarct vol. in ischemic stroke or heart attack situations. Such methods

employ iron-contg. complexes of a compn. comprising a dithiocarbamate and a macromol. as contrast agents. Prepn. of a reaction product of bovine serum albumin with N-methyl-D-glucamine dithiocarbamate is described.

ST dithiocarbamate macromol therapeutic diagnostic; albumin dithiocarbamate therapeutic diagnostic; MRI contrast dithiocarbamate macromol iron complex; cerebral stroke ischemia reperfusion dithiocarbamate macromol; **nitric oxide synthase** dithiocarbamate macromol

IT AIDS (disease)  
 AIDS (disease)  
 (AIDS dementia complex; polydithiocarbamate-contg. macromols. for therapeutic and diagnostic applications)

IT Mental disorder  
 Mental disorder  
 (AIDS dementia; polydithiocarbamate-contg. macromols. for therapeutic and diagnostic applications)

IT Nervous system  
 (Huntington's chorea; polydithiocarbamate-contg. macromols. for therapeutic and diagnostic applications)

IT Imaging agents  
 Imaging agents  
 (NMR contrast; polydithiocarbamate-contg. macromols. for therapeutic and diagnostic applications)

IT Respiratory distress syndrome  
 (adult; polydithiocarbamate-contg. macromols. for therapeutic and diagnostic applications)

IT Skin, disease  
 (aging, disorder, photoaging, and photodamage; polydithiocarbamate-contg. macromols. for therapeutic and diagnostic applications)

IT Transplant rejection  
 (allotransplant; polydithiocarbamate-contg. macromols. for therapeutic and diagnostic applications)

IT Nervous system  
 (amyotrophic lateral sclerosis; polydithiocarbamate-contg. macromols. for therapeutic and diagnostic applications)

IT Nervous system  
 Nervous system  
 (central, trauma; polydithiocarbamate-contg. macromols. for therapeutic and diagnostic applications)

IT Fatigue, biological  
 (chronic fatigue syndrome; polydithiocarbamate-contg. macromols. for therapeutic and diagnostic applications)

IT Nervous system  
 (degeneration; polydithiocarbamate-contg. macromols. for therapeutic and diagnostic applications)

IT Gastrointestinal motility  
 (disorder, dysmotility, dysmotility; polydithiocarbamate-contg. macromols. for therapeutic and diagnostic applications)

IT **Fertility**  
 (enhancement; polydithiocarbamate-contg. macromols. for therapeutic and diagnostic applications)

IT Heart, disease  
 Kidney, disease  
 (failure; polydithiocarbamate-contg. macromols. for therapeutic and diagnostic applications)

IT Drugs  
 (gastrointestinal; polydithiocarbamate-contg. macromols. for therapeutic and diagnostic applications)

IT Kidney, disease  
 (glomerulonephritis; polydithiocarbamate-contg. macromols. for therapeutic and diagnostic applications)

IT Transplant and Transplantation  
 (graft-vs.-host reaction; polydithiocarbamate-contg. macromols. for

therapeutic and diagnostic applications)

IT Antitumor agents  
Antitumor agents  
(hematol.; polydithiocarbamate-contg. macromols. for therapeutic and diagnostic applications)

IT Dialysis  
(hemodialysis; polydithiocarbamate-contg. macromols. for therapeutic and diagnostic applications)

IT Shock (circulatory collapse)  
(hemorrhagic; polydithiocarbamate-contg. macromols. for therapeutic and diagnostic applications)

IT Appetite  
(hyperphagia; polydithiocarbamate-contg. macromols. for therapeutic and diagnostic applications)

IT Intestine, disease  
(ileitis; polydithiocarbamate-contg. macromols. for therapeutic and diagnostic applications)

IT Intestine  
(ileum, disease, ileitis; polydithiocarbamate-contg. macromols. for therapeutic and diagnostic applications)

IT Intestine, disease  
(inflammatory; polydithiocarbamate-contg. macromols. for therapeutic and diagnostic applications)

IT Head  
Lung, disease  
Reperfusion  
(injury; polydithiocarbamate-contg. macromols. for therapeutic and diagnostic applications)

IT Brain, disease  
(ischemia, focal; polydithiocarbamate-contg. macromols. for therapeutic and diagnostic applications)

IT Brain, disease  
(ischemia; polydithiocarbamate-contg. macromols. for therapeutic and diagnostic applications)

IT Infection  
(leading to overprod. of inflammatory cytokines; polydithiocarbamate-contg. macromols. for therapeutic and diagnostic applications)

IT Drugs  
(lung injury from; polydithiocarbamate-contg. macromols. for therapeutic and diagnostic applications)

IT Meningitis  
(lymphocytic choriomeningitis; polydithiocarbamate-contg. macromols. for therapeutic and diagnostic applications)

IT Myeloproliferative disorders  
(myelofibrosis; polydithiocarbamate-contg. macromols. for therapeutic and diagnostic applications)

IT Heart, disease  
(myocarditis; polydithiocarbamate-contg. macromols. for therapeutic and diagnostic applications)

IT Cytoprotective agents  
(neuroprotectants; polydithiocarbamate-contg. macromols. for therapeutic and diagnostic applications)

IT Scavengers  
(nitric oxide; polydithiocarbamate-contg. macromols. for therapeutic and diagnostic applications)

IT Pancreas, disease  
(pancreatitis; polydithiocarbamate-contg. macromols. for therapeutic and diagnostic applications)

IT Peritoneum  
(peritonitis; polydithiocarbamate-contg. macromols. for therapeutic and diagnostic applications)

IT Skin, disease

(photoaging, and photodamage; polydithiocarbamate-contg. macromols. for therapeutic and diagnostic applications)

- IT Analgesics
- Anaphylaxis
- Anti-AIDS agents
- Anti-Alzheimer's agents
- Anti-inflammatory agents
- Anti-ischemic agents
- Antiarthritics
- Antiasthmatics
- Anticonvulsants
- Antidepressants
- Antidiabetic agents
- Antimalarials
- Antimigraine agents
- Antiobesity agents
- Antiparkinsonian agents
- Antitumor agents
- Antiulcer agents
- Anxiolytics
- Autoimmune disease
- Burn
- Cachexia
- Cardiovascular agents
- Cirrhosis
- Cystic fibrosis
- Dermatitis
- Drug delivery systems
- Drug dependence
- Eczema
- Encephalomyelitis
- Eye, disease
- Hepatitis
- Liver, disease
- Meningitis
- Multiple sclerosis
- Nervous system agents
- Organ preservation
- Psoriasis
- Schizophrenia
- Shock (circulatory collapse)
- Transplant rejection
- Urticaria
- (polydithiocarbamate-contg. macromols. for therapeutic and diagnostic applications)
- IT Cytokines
- RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)
- (polydithiocarbamate-contg. macromols. for therapeutic and diagnostic applications)
- IT Ovarian cycle
- (premenstrual syndrome; polydithiocarbamate-contg. macromols. for therapeutic and diagnostic applications)
- IT Penis
- (priapism; polydithiocarbamate-contg. macromols. for therapeutic and diagnostic applications)
- IT Hemocyanins
- Nucleic acids
- Ovalbumin
- RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
- (reaction products with dithiocarbamates; polydithiocarbamate-contg.

macromols. for therapeutic and diagnostic applications)

IT Albumins, biological studies  
 Polysaccharides, biological studies  
 Proteins, specific or class  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (reaction products, with dithiocarbamates; polydithiocarbamate-contg. macromols. for therapeutic and diagnostic applications)

IT Albumins, reactions  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reaction; polydithiocarbamate-contg. macromols. for therapeutic and diagnostic applications)

IT Shock (circulatory collapse)  
 (septic; polydithiocarbamate-contg. macromols. for therapeutic and diagnostic applications)

IT Antitumor agents  
 (solid tumor; polydithiocarbamate-contg. macromols. for therapeutic and diagnostic applications)

IT Brain, disease  
 (stroke; polydithiocarbamate-contg. macromols. for therapeutic and diagnostic applications)

IT Lupus erythematosus  
 (systemic; polydithiocarbamate-contg. macromols. for therapeutic and diagnostic applications)

IT Shock (circulatory collapse)  
 (toxic shock syndrome; polydithiocarbamate-contg. macromols. for therapeutic and diagnostic applications)

IT Bacteria (Eubacteria)  
 (translocation; polydithiocarbamate-contg. macromols. for therapeutic and diagnostic applications)

IT Shock (circulatory collapse)  
 (traumatic; polydithiocarbamate-contg. macromols. for therapeutic and diagnostic applications)

IT Blood vessel, disease  
 (vasculitis; polydithiocarbamate-contg. macromols. for therapeutic and diagnostic applications)

IT 125978-95-2, **Nitric oxide synthase**  
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)  
 (inducible; polydithiocarbamate-contg. macromols. for therapeutic and diagnostic applications)

IT 7439-89-6, Iron, biological studies  
 RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)  
 (overload; polydithiocarbamate-contg. macromols. for therapeutic and diagnostic applications)

IT 594-07-0D, Dithiocarbamic acid, dithiocarbamate-macromol. products  
 1398-61-4D, Chitin, dithiocarbamate reaction products 7439-89-6D, Iron, complexes with dithiocarbamate-macromol. products, biological studies  
 9000-07-1D, Carrageenan, dithiocarbamate reaction products 9000-30-0D, Guar gum, dithiocarbamate reaction products 9000-40-2D, Locust bean gum, dithiocarbamate reaction products 9000-69-5D, Pectin, dithiocarbamate reaction products 9004-34-6D, Cellulose, dithiocarbamate reaction products, biological studies 9004-54-0D, Dextran, dithiocarbamate reaction products, biological studies 9004-61-9D, Hyaluronic acid, dithiocarbamate reaction products 9005-25-8D, Starch, dithiocarbamate reaction products, biological studies 9005-32-7D, Alginic acid, dithiocarbamate reaction products 9005-49-6D, Heparin, dithiocarbamate reaction products, biological studies 9005-79-2D, Glycogen, dithiocarbamate reaction products, biological studies 9005-80-5D, Inulin, dithiocarbamate reaction products 9012-36-6D, Agarose, dithiocarbamate reaction products 9012-76-4D, Chitosan, dithiocarbamate



reaction products 9013-95-0D, Levan, dithiocarbamate reaction products 11138-66-2D, Xanthan gum, dithiocarbamate reaction products 29894-36-8D, Polymannuronic acid, dithiocarbamate reaction products 39464-87-4D, Scleroglucan, dithiocarbamate reaction products 71010-52-1D, Gellan gum, dithiocarbamate reaction products 94161-07-6D, albumin reaction products RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(polydithiocarbamate-contg. macromols. for therapeutic and diagnostic applications)

IT 94161-07-6

RL: RCT (Reactant); RACT (Reactant or reagent)

(reaction; polydithiocarbamate-contg. macromols. for therapeutic and diagnostic applications)

IT 10102-43-9, Nitric oxide, biological studies

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(scavenger; polydithiocarbamate-contg. macromols. for therapeutic and diagnostic applications)

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Demuth; US 5387748 A 1995 CAPLUS

L17 ANSWER 16 OF 18 CAPLUS COPYRIGHT 2003 ACS

AN 1997:745947 CAPLUS

DN 128:19047

TI Improvement of implantation rates after in vitro fertilization by administering a nitric oxide substrate and/or donor

IN Chwalsz, Krzysztof; Garfield, Robert E.

PA Schering Aktiengesellschaft, Germany

SO PCT Int. Appl., 38 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM A61K031-565

ICS A61K031-57; A61K031-22; A61K031-195; A61K031-34; A61K031-44

CC 2-3 (Mammalian Hormones)

Section cross-reference(s): 63

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9741866	A1	19971113	WO 1997-EP2371	19970507
W:	AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG			
US 6040340	A	20000321	US 1996-646518	19960507
AU 9728947	A1	19971126	AU 1997-28947	19970507
EP 906105	A1	19990407	EP 1997-923032	19970507
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI			
CN 1218402	A	19990602	CN 1997-194452	19970507
BR 9708980	A	19990803	BR 1997-8980	19970507
JP 2000510462	T2	20000815	JP 1997-539553	19970507
NO 9805204	A	19990106	NO 1998-5204	19981106
KR 2000010833	A	20000225	KR 1998-708974	19981106
PRAI US 1996-646518	A	19960507		
WO 1997-EP2371	W	19970507		

AB A method is provided for the improvement of implantation rates and/or pregnancy rates in a female mammal, comprising administering to a female mammal in whom pregnancy is desired an effective amt. of: (a) a **nitric oxide synthase** substrate, a nitric oxide donor, or both, optionally in combination with, (b) a progestin, and, (c) optionally, in further combination with an estrogen. A method is also provided for **fertility** control for a female mammal, comprising administering to a female mammal in whom pregnancy is not desired and at risk of becoming pregnant an effective amt. of **nitric oxide synthase** inhibitor in combination with an antiprogestin. Pharmaceutical compns. are also provided.

ST implantation in vitro fertilization nitric oxide; contraceptive

IT **nitric oxide synthase** inhibitor antiprogestin

IT Progestogens

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(antiprogestins; **fertility** control using a **nitric oxide synthase** inhibitor in combination with an antiprogestin)

IT **Fertility**

(female, disorder; improvement of implantation rates after in vitro fertilization by administering a nitric oxide substrate and/or donor)

IT **Fertility**

(female, female **fertility** disorders; improvement of implantation rates after in vitro fertilization by administering a nitric oxide substrate and/or donor)

IT Contraceptives

(**fertility** control using a **nitric oxide synthase** inhibitor in combination with an antiprogestin)

IT Embryo, animal

(improvement of implantation rates after in vitro fertilization by administering a nitric oxide substrate and/or donor)

IT Estrogens

Progestogens

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(improvement of implantation rates after in vitro fertilization by administering a nitric oxide substrate and/or donor and optionally a progestin and estrogen)

IT Fertilization

(in vitro; improvement of implantation rates after in vitro fertilization by administering a nitric oxide substrate and/or donor)

IT Pregnancy

(rate; improvement of implantation rates after in vitro fertilization by administering a nitric oxide substrate and/or donor)

IT Abortion

(spontaneous; prevention of early pregnancy loss by administering a nitric oxide substrate and/or donor)

IT 79-17-4, Aminoguanidine 504-29-0, 2-Aminopyridine 1121-58-0, 4-Methylaminopyridine 5407-87-4, 4,6-Dimethyl-2-aminopyridine 17035-90-4 36889-13-1 52450-18-7, AMT 53774-63-3 80471-63-2, Epostane 84371-65-3, Mifepristone 118968-41-5, ORG 31710 126784-99-4, CDB2914 155768-17-5, ORG 33628 198907-45-8, ZK 137316 199396-76-4, J 867

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(**fertility** control using a **nitric oxide synthase** inhibitor in combination with an antiprogestin)

IT 55-63-0, Nitroglycerin 74-79-3, L-Arginine, biological studies

87-33-2, Isosorbide dinitrate 10102-43-9D, Nitric oxide, substrates and donors 14402-89-2, Sodium nitroprusside 16051-77-7, Isosorbide mononitrate 33876-97-0, SIN-1 125978-95-2D, **Nitric**

**oxide synthase**, substrates and inhibitors

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(improvement of implantation rates after in vitro fertilization by administering a nitric oxide substrate and/or donor)

IT 50-28-2, Estradiol, biological studies 57-83-0, Progesterone, biological studies 630-56-8, Hydroxyprogesterone caproate 979-32-8, Estradiol valerate 96346-61-1, Onapristone

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(improvement of implantation rates after in vitro fertilization by administering a nitric oxide substrate and/or donor and optionally a progestin and estrogen)

L17 ANSWER 17 OF 18 CAPLUS COPYRIGHT 2003 ACS

AN 1996:324262 CAPLUS

DN 125:54130

TI The immunohistochemical localization of **nitric oxide**

**synthase** (NOS) in the human male reproductive tract and in spermatozoa, suggests a possible role for nitric oxide in spermatogenesis and sperm maturation and an association with subfertility.

AU Zini, Armand; O'Bryan, Moira K.; Magid, Margaret; Schlegel, Peter N.

CS Department Urology, James Buchanan Brady Foundation, New York, NY, 10021, USA

SO Portland Press Proceedings (1996), 10(Biology of Nitric Oxide Part 5), 19 CODEN: POPPEF; ISSN: 0966-4068

PB Portland Press

DT Journal

LA English

CC 13-1 (Mammalian Biochemistry)

Section cross-reference(s): 14

AB **Nitric oxide synthase** (NOS) was present in

the human male reproductive tract and in spermatozoa. The NOS was distributed throughout the cytoplasm of Leydig cells and Sertoli cells in normal and subjects with subfertility. The NOS in the epididymis and vas deferens was almost exclusively confined to the epithelium. Thus, the NOS may play an important role in the function of the human male reproductive system.

ST NO synthase male reproductive tract sperm; subfertility NO synthase male reproductive tract

IT Cytoplasm

Epididymis

Vas deferens

(localization and role of **nitric oxide**

**synthase** in human male reproductive tract and in spermatozoa)

IT Sperm

(localization and role of **nitric oxide**

**synthase** in normal and subfertile human male reproductive tract and in spermatozoa)

IT Testis

(Leydig cell, localization and role of **nitric oxide**

**synthase** in human male reproductive tract and in spermatozoa)

IT Testis

(Sertoli cell, localization and role of **nitric oxide**

**synthase** in human male reproductive tract and in spermatozoa)

IT **Fertility**

(disorder, subfertility, localization and role of **nitric**

**oxide synthase** in human male reproductive tract and in spermatozoa)

IT Reproductive tract

(male, localization and role of **nitric oxide synthase** in normal and subfertile human male reproductive tract and in spermatozoa)

IT 125978-95-2, **Nitric oxide synthase**

RL: BAC (Biological activity or effector, except adverse); BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)

(localization and role of **nitric oxide**

**synthase** in normal and subfertile human male reproductive tract and in spermatozoa)

L17 ANSWER 18 OF 18 CAPLUS COPYRIGHT 2003 ACS

AN 1995:688648 CAPLUS

DN 123:80417

TI **Nitric oxide synthase** in the rat fallopian tube is regulated during the estrous cycle

AU Bryant, C. E.; Tomlinson, A.; Mitchell, J. A.; Thiemermann, C.; Willoughby, D. A.

CS Dep. Exp. Pathol., Med. Coll. St. Bartholomew's Hosp., London, EC1M 6BQ, UK

SO Journal of Endocrinology (1995), 146(1), 149-57  
CODEN: JOENAK; ISSN: 0022-0795

PB Journal of Endocrinology

DT Journal

LA English

CC 13-6 (Mammalian Biochemistry)

Section cross-reference(s): 2, 7

AB Nitric oxide produced from L-arginine by **nitric oxide**

**synthase** (NOS) acts in a variety of biol. processes via the stimulation of guanylyl cyclase and subsequent elevation of cGMP. Constitutive, calcium-dependent isoforms of NOS are found in endothelial cells (eNOS) and neurons (nNOS), while macrophages express an inducible, calcium-independent isoform (iNOS) in response to the action of certain cytokines or bacterial endotoxin. While the regulation of NOS by exogenous glucocorticoids and steroid hormones as well documented, the effects of endogenous steroid hormones on NOS activity, such as those released during the estrous cycle, is unknown. Here the authors demonstrate, using specific antibodies for eNOS, nNOS and iNOS, the presence of NOS in the epithelium of rat fallopian tubes at proestrus, late proestrus, estrus, metestrus and diestrus. Western blot anal. of rat fallopian tube homogenates revealed a protein band at approx. 125 kDa, which was recognized by antibodies to different isoforms of NOS, but no bands at the expected mol. wts. (eNOS, 140 kDa; nNOS, 160 kDa; iNOS, 135 kDa). NOS activity in fallopian tubes was measured by the conversion of L-[3H]arginine to L-[3H]citrulline. Both calcium-dependent and -independent NOS activities were present. However, in late proestrus when circulating estrogens are low, NOS activity was reduced in comparison to all other stages of the estrous cycle. Thus the authors show that NOS is present in the epithelial lining of the fallopian tube and is recognized at a previously undescribed mol. wt. The changes in NOS activity in these cells during the estrous cycle may modulate tube motility and contribute to successful **fertility**.

ST **nitric oxide synthase** oviduct; ovarian cycle

**nitric oxide synthase**

IT Ovarian cycle

(**nitric oxide synthase** isoforms in rat fallopian tube in relation to estrous cycle)

IT Estrogens

RL: BAC (Biological activity or effector, except adverse); BSU (Biological

study, unclassified); BIOL (Biological study)  
(**nitric oxide synthase** isoforms in rat  
fallopian tube in relation to estrous cycle)

IT Oviduct  
(epithelium, **nitric oxide synthase**  
isoforms in rat fallopian tube in relation to estrous cycle)

IT 125978-95-2, **Nitric oxide synthase**  
RL: BOC (Biological occurrence); BPR (Biological process); BSU (Biological  
study, unclassified); BIOL (Biological study); OCCU (Occurrence); PROC  
(Process)

(**nitric oxide synthase** isoforms in rat  
fallopian tube in relation to estrous cycle)  
IT 10102-43-9, Nitric oxide, biological studies  
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL  
(Biological study); PROC (Process)

(**nitric oxide synthase** isoforms in rat  
fallopian tube in relation to estrous cycle)

=> e implantation

E1	1	IMPLANTATIOH/BI
E2	1	IMPLANTATIOM/BI
E3	78734 -->	IMPLANTATION/BI
E4	27	IMPLANTATIONAL/BI
E5	1	IMPLANTATIONAND/BI
E6	1	IMPLANTATIONAT/BI
E7	1	IMPLANTATIONG/BI
E8	2	IMPLANTATIONIN/BI
E9	2	IMPLANTATIONM/BI
E10	2	IMPLANTATIONNN/BI
E11	1	IMPLANTATIONNNALLY/BI
E12	1	IMPLANTATIONON/BI

=> s e3

L18 78734 IMPLANTATION/BI

=> s l18 and l12

L19 99 L18 AND L12

=> s l19 and l13

L20 5 L19 AND L13

=> d l20 1-5

L20 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2003 ACS

AN 2002:869589 CAPLUS

DN 137:346927

TI **Implantation** rates after in vitro fertilization, and treatment  
of infertility and early pregnancy loss with a nitric oxide donor or  
substrate alone or in combination with progesterone, and a method for  
contraception with nitric oxide inhibitors in combination with  
antiprogestins or other agents

IN Chwalisz, Krzysztof; Garfield, Robert E.  
PA Germany

SO U.S. Pat. Appl. Publ., 15 pp., Division of U.S. Ser. No. 162,446.  
CODEN: USXXCO

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	US 2002169205	A1	20021114	US 2002-43232	20020114

PRAI US 1998-162446 A3 19980929

L20 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2003 ACS

AN 1999:203927 CAPLUS

DN 131:39874

TI Synergistic role of nitric oxide and progesterone during the establishment of pregnancy in the rat

AU Chwalisz, Kristof; Winterhager, Elke; Thienel, Thomas; Garfield, Robert E.

CS Research Laboratories of Schering AG, Berlin, 13342, Germany

SO Human Reproduction (1999), 14(2), 542-552

CODEN: HUREEE; ISSN: 0268-1161

PB Oxford University Press

DT Journal

LA English

RE.CNT 59 THERE ARE 59 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2003 ACS

AN 1998:309186 CAPLUS

DN 129:79672

TI Chronic nitric oxide synthesis inhibition does not prevent pregnancy vasodilation in the rat

AU Ahokas, Robert A., Ph. D.; Lubarsky, Suzanne L., M. D.; Park, Gun-Chae, M. D.; Friedman, Steven A., M. D.; Sibai, Baha M., M. D.

CS Department of Obstetrics and Gynecology, University of Tennessee, Memphis, TN, USA

SO Hypertension in Pregnancy (1998), 17(1), 55-68

CODEN: HYPPEV; ISSN: 1064-1955

PB Marcel Dekker, Inc.

DT Journal

LA English

RE.CNT 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2003 ACS

AN 1997:572956 CAPLUS

DN 127:242956

TI Differential effect of L-NAME and S-methyl-isothiourea on leukocyte emigration in carrageenin-soaked sponge implants in rat

AU Iuvone, Teresa; Van Osselaer, Nancy; D'acquisto, Fulvio; Carnuccio, Rosa; Herman, Arnold G.

CS Division of Pharmacology, Faculty of Medicine, University of Antwerpen (UIA), Antwerpen-Wilrijk, B-2610, Belg.

SO British Journal of Pharmacology (1997), 121(8), 1637-1644

CODEN: BJPCBM; ISSN: 0007-1188

PB Stockton

DT Journal

LA English

L20 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2003 ACS

AN 1995:259445 CAPLUS

DN 122:71778

TI Inhibitors of **nitric oxide synthase** as potential treatments for opioid withdrawal

AU London, E. D.; Vaupel, D. B.; Kimes, A. S.

CS Neuroimaging and Drug Action Section, Natl. Inst. Drug Abuse, Baltimore, MD, USA

SO Regulatory Peptides (1994), 54(1), 165-6

CODEN: REPPDY; ISSN: 0167-0115

PB Elsevier

DT Journal

LA English

=> d 120 3-5 all

L20 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2003 ACS  
AN 1998:309186 CAPLUS  
DN 129:79672  
TI Chronic nitric oxide synthesis inhibition does not prevent pregnancy  
vasodilation in the rat  
AU Ahokas, Robert A., Ph. D.; Lubarsky, Suzanne L., M. D.; Park, Gun-Chae, M.  
D.; Friedman, Steven A., M. D.; Sibai, Baha M., M. D.  
CS Department of Obstetrics and Gynecology, University of Tennessee, Memphis,  
TN, USA  
SO Hypertension in Pregnancy (1998), 17(1), 55-68  
CODEN: HYPPEV; ISSN: 1064-1955  
PB Marcel Dekker, Inc.  
DT Journal  
LA English  
CC 13-6 (Mammalian Biochemistry)  
Section cross-reference(s): 1  
AB The objective is to det. if blockade of endothelium-derived nitric oxide  
synthesis from the day after embryo **implantation** to the day  
before parturition prevents maternal systemic vasodilation in the rat.  
Timed-pregnant and age-matched nonpregnant Wistar-Kyoto rats were  
administered the nonselective **nitric oxide  
synthase** inhibitor N.omega.-nitro-L-arginine Me ester (15  
mg/rat/day, s.c.) or saline vehicle (untreated) for 14 days using osmotic  
minipumps. On the last day of treatment (day 20 of gestation in the  
pregnant rats), plasma total nitrate/nitrite concn., mean arterial blood  
pressure, and heart rate were measured. Cardiac output and organ blood  
flows were then measured using radioactive-labeled microspheres for the  
calcn. of total systemic and organ/tissue vascular conductances, resp.  
Chronic blockade of nitric oxide synthesis decreased plasma  
nitrate/nitrite concn. >90% and induced hypertension with decreased  
cardiac output and organ blood flows in both nonpregnant and pregnant  
rats. Cardiac output and total vascular conductance were significantly  
increased in the pregnant compared to nonpregnant, untreated normotensive  
rats and in nitric-oxide-blocked hypertensive rats. Vascular conductance  
of the skin, skeletal muscle/skeleton, gastrointestinal tract, heart, and  
uterus were significantly greater in pregnant than in nonpregnant rats of  
both treatment groups. Conclusions: Maternal systemic and uterine  
vasodilation during pregnancy is complex and is caused by some  
mechanism(s) other than increased basal endothelium-derived nitric oxide  
prodn. or by a compensatory increase in some other vasodilatory system  
during nitric oxide synthesis blockade.  
ST nitric oxide inhibition pregnancy vasodilation relationship  
IT Blood pressure  
Circulation  
Pregnancy  
Vasodilation  
(pregnancy vasodilation independent of chronic nitric oxide synthesis  
inhibition)  
IT 50903-99-6, N.omega.-Nitro-L-arginine methyl ester  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological  
study, unclassified); BIOL (Biological study)  
(pregnancy vasodilation independent of chronic nitric oxide synthesis  
inhibition)  
IT 125978-95-2, **Nitric oxide synthase**  
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL  
(Biological study); PROC (Process)  
(pregnancy vasodilation independent of chronic nitric oxide synthesis  
inhibition)

IT 10102-43-9, Nitric oxide, biological studies  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(pregnancy vasodilation independent of chronic nitric oxide synthesis inhibition)

RE.CNT 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD  
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- (1) Ahokas, R; Am J Obstet Gynecol 1990, V162, P841 MEDLINE
- (2) Ahokas, R; Am J Obstet Gynecol 1991, V165, P801 CAPLUS
- (3) Aisaka, K; Biochem Biophys Res Commun 1989, V160, P881 CAPLUS
- (4) Baylis, C; Hypertens Pregn 1994, V13, P342
- (5) Buhimschi, I; Human Reprod 1995, V10, P2723 CAPLUS
- (6) Conrad, K; Am J Physiol 1989, V257, PR847 CAPLUS
- (7) Conrad, K; Am J Physiol 1994, V266, PR1267 CAPLUS
- (8) Conrad, K; FASEB J 1993, V7, P566 CAPLUS
- (9) Danielson, L; Circ Res 1996, V79, P1161 CAPLUS
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- (11) Garland, H; J Endocrinol 1987, V113, P435 CAPLUS
- (12) Gilson, J; Am J Physiol 1992, V263, PH1911
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L20 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2003 ACS

AN 1997:572956 CAPLUS

DN 127:242956

TI Differential effect of L-NAME and S-methyl-isothiourea on leukocyte emigration in carrageenin-soaked sponge implants in rat

AU Iuvone, Teresa; Van Osselaer, Nancy; D'acquisto, Fulvio; Carnuccio, Rosa; Herman, Arnold G.

CS Division of Pharmacology, Faculty of Medicine, University of Antwerpen (UIA), Antwerpen-Wilrijk, B-2610, Belg.

SO British Journal of Pharmacology (1997), 121(8), 1637-1644  
CODEN: BJPCBM; ISSN: 0007-1188

PB Stockton

DT Journal

LA English

CC 1-7 (Pharmacology)

Section cross-reference(s): 14, 15

AB The role of nitric oxide (NO) in leukocyte (polymorphonuclear cells,



monocytes and lymphocytes) emigration was studied in a model of carrageenin-sponge implants in rats. The s.c. **implantation** of 1% (w/v) of  $\lambda$ -carrageenin-soaked sponges elicited an inflammatory response that was characterized by a time-related increase in leukocyte infiltration in the sponges and increased levels of nitrite in the exudate. Total leukocyte infiltration and nitrite prodn. were maximal at 24 h and decreased after 48 and 96 h. The mononuclear cell influx was maximal at 48 h (21% of the total leukocytes). Therefore, this time point was used in the successive expts. Polymorphonuclear cell (PMN) and lymphocyte infiltration in the sponges significantly increased when rats were treated with the non-specific NO-synthase (NOS) inhibitor, NG-nitro-L-arginine methylester (L-NAME) (1 mg ml<sup>-1</sup> in drinking water ad libitum). Monocyte emigration was not affected by L-NAME treatment. The nitrite levels in the exudate of L-NAME-treated rats were significantly reduced. The concomitant ingestion of L-arginine (30 mg ml<sup>-1</sup>) resulted in a reversion of the L-NAME effect, while D-arginine (30 mg ml<sup>-1</sup>) had no effect, indicating the involvement of the L-arginine: NO pathway. Administration of L-NAME resulted also in an increased release of tumor necrosis factor- $\alpha$ . (TNF- $\alpha$ .) and prostacyclin (measured as the stable metabolite, 6-keto-PGF $_{1\alpha}$ ). L-NAME had no effect on monocyte chemoattractant protein-1 (MCP-1) release in the exudate. Since L-NAME may have effects on the local blood flow, phenylephrine (0.034 mg ml<sup>-2</sup> in drinking water) was used as it has an effect on the local blood flow similar to L-NAME. Phenylephrine had no effect on either leukocyte emigration, or on nitrite, TNF- $\alpha$ ., prostacyclin or MCP-1 accumulation in the exudate. In contrast, the more selective iNOS inhibitor S-methyl-isothiourea (SMT) (10  $\mu$ g ml<sup>-1</sup> in drinking water) significantly reduced PMNs and lymphocyte influx in the sponge, having no effect on monocyte influx. Moreover, SMT decreased nitrite prodn. in the exudate to a comparable extent as L-NAME. Administration of SMT significantly reduced MCP-1 release in the exudate, without an effect on TNF- $\alpha$ . or prostacyclin prodn. Moreover SMT did not produce any changes in local blood flow. The results show that a different outcome of the inflammatory process can be obtained depending on the types of NOS inhibitor used. Furthermore, by inhibiting leukocyte infiltration, the more specific iNOS inhibitors may be useful in the treatment of certain inflammatory reactions which are assocd. with an enhanced formation of NO due to the induction of iNOS.

- ST leukocyte emigration inflammation NAME methylisothiourea; **nitric oxide synthase** inhibitor leukocyte emigration
- IT Anti-inflammatory agents
  - Inflammation
  - Monocyte
  - Polymorphonuclear leukocyte
    - (differential effect of L-NAME and methyl-isothiourea on leukocyte emigration in inflammation from carrageenin-soaked sponge implants in rat in relation to role of nitric oxide and inflammatory mediators)
- IT Monocyte chemoattractant protein-1
  - Tumor necrosis factors
    - RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
    - (differential effect of L-NAME and methyl-isothiourea on leukocyte emigration in inflammation from carrageenin-soaked sponge implants in rat in relation to role of nitric oxide and inflammatory mediators)
- IT Cell migration
  - (leukocyte; differential effect of L-NAME and methyl-isothiourea on leukocyte emigration in inflammation from carrageenin-soaked sponge implants in rat in relation to role of nitric oxide and inflammatory mediators)
- IT Cell migration
  - (lymphocyte; differential effect of L-NAME and methyl-isothiourea on leukocyte emigration in inflammation from carrageenin-soaked sponge

implants in rat in relation to role of nitric oxide and inflammatory mediators).

IT Leukocyte  
Lymphocyte  
(migration; differential effect of L-NAME and methyl-isothiourea on leukocyte emigration in inflammation from carrageenin-soaked sponge implants in rat in relation to role of nitric oxide and inflammatory mediators)

IT 2986-19-8, S-Methyl-isothiourea **50903-99-6**, NG-Nitro-L-arginine methylester,  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(differential effect of L-NAME and methyl-isothiourea on leukocyte emigration in inflammation from carrageenin-soaked sponge implants in rat in relation to role of nitric oxide and inflammatory mediators)

IT 10102-43-9, Nitric oxide, biological studies 35121-78-9, Prostacyclin 58962-34-8 125978-95-2, **Nitric oxide synthase**  
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)  
(differential effect of L-NAME and methyl-isothiourea on leukocyte emigration in inflammation from carrageenin-soaked sponge implants in rat in relation to role of nitric oxide and inflammatory mediators)

L20 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2003 ACS  
AN 1995:259445 CAPLUS  
DN 122:71778  
TI Inhibitors of **nitric oxide synthase** as potential treatments for opioid withdrawal  
AU London, E. D.; Vaupel, D. B.; Kimes, A. S.  
CS Neuroimaging and Drug Action Section, Natl. Inst. Drug Abuse, Baltimore, MD, USA  
SO Regulatory Peptides (1994), 54(1), 165-6  
CODEN: REPPDY; ISSN: 0167-0115  
PB Elsevier  
DT Journal  
LA English  
CC 1-11 (Pharmacology)  
AB The effects of inhibitors of **nitric oxide synthase** (NOS) on opioid withdrawal signs e.g. wt. loss, diarrhea, wet-dog shakes, etc., were studied in rats that were made morphine-dependent by s.c. **implantation** of morphine pellets. The results indicated that the selective brain NOS inhibitor 7-nitroindazole is more effective in inhibiting the withdrawal signs than the 2 nonselective NOS inhibitors, L-NNA and L-NAME.

ST **nitric oxide synthase** inhibitor opioid withdrawal  
IT Brain  
Drug dependence  
(inhibitors of brain **nitric oxide synthase** as potential treatments for opioid withdrawal)

IT Opioids  
RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)  
(inhibitors of brain **nitric oxide synthase** as potential treatments for opioid withdrawal)

IT 57-27-2, Morphine, biological studies  
RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)  
(inhibitors of brain **nitric oxide synthase** as potential treatments for opioid withdrawal)

IT 2149-70-4, L-NG-Nitroarginine 2942-42-9, 7-Nitroindazole **50903-99-6**, L-NAME

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(inhibitors of brain **nitric oxide synthase**  
as potential treatments for opioid withdrawal)

IT 125978-95-2, **Nitric oxide synthase**

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(inhibitors; inhibitors of brain **nitric oxide synthase** as potential treatments for opioid withdrawal)

=> e contraception

E1	1	CONTRACEPTINES/BI
E2	2	CONTRACEPTING/BI
E3	2635 -->	CONTRACEPTION/BI
E4	1	CONTRACEPTIONAL/BI
E5	2	CONTRACEPTIONS/BI
E6	1	CONTRACEPTIV/BI
E7	2	CONTRACEPTIVA/BI
E8	10643	CONTRACEPTIVE/BI
E9	11	CONTRACEPTIVELY/BI
E10	12642	CONTRACEPTIVES/BI
E11	1	CONTRACEPTIVITY/BI
E12	1	CONTRACEPTORS/BI

=> s e3-e10

	2635	CONTRACEPTION/BI
	1	CONTRACEPTIONAL/BI
	2	CONTRACEPTIONS/BI
	1	CONTRACEPTIV/BI
	2	CONTRACEPTIVA/BI
	10643	CONTRACEPTIVE/BI
	11	CONTRACEPTIVELY/BI
	12642	CONTRACEPTIVES/BI
L21	14591	(CONTRACEPTION/BI OR CONTRACEPTIONAL/BI OR CONTRACEPTIONS/BI OR CONTRACEPTIV/BI OR CONTRACEPTIVA/BI OR CONTRACEPTIVE/BI OR CONTRACEPTIVELY/BI OR CONTRACEPTIVES/BI)

=> s l21 and l13

L22 3 L21 AND L13

=> d l22 1-3

L22 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2003 ACS

AN 2002:869589 CAPLUS

DN 137:346927

TI Implantation rates after in vitro fertilization, and treatment of infertility and early pregnancy loss with a nitric oxide donor or substrate alone or in combination with progesterone, and a method for **contraception** with nitric oxide inhibitors in combination with antiprogestins or other agents

IN Chwalisz, Krzysztof; Garfield, Robert E.  
PA Germany

SO U.S. Pat. Appl. Publ., 15 pp., Division of U.S. Ser. No. 162,446.  
CODEN: USXXCO

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	US 2002169205	A1	20021114	US 2002-43232	20020114

PRAI US 1998-162446 A3 19980929

L22 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2003 ACS  
AN 1999:203927 CAPLUS  
DN 131:39874  
TI Synergistic role of nitric oxide and progesterone during the establishment of pregnancy in the rat  
AU Chwalisz, Kristof; Winterhager, Elke; Thienel, Thomas; Garfield, Robert E.  
CS Research Laboratories of Schering AG, Berlin, 13342, Germany  
SO Human Reproduction (1999), 14(2), 542-552  
CODEN: HUREEE; ISSN: 0268-1161  
PB Oxford University Press  
DT Journal  
LA English  
RE.CNT 59 THERE ARE 59 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2003 ACS  
AN 1995:795168 CAPLUS  
DN 123:189355  
TI Ovulation control by regulating nitric oxide levels  
IN Garfield, Robert E.; Yallampalli, Chandrasekhar  
PA Board of Regents, University of Texas System, USA  
SO PCT Int. Appl., 30 pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9515753	A1	19950615	WO 1994-US14133	19941208
	W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, ES, FI, GB, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LT, LU, LV, MD, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT, UA, UZ, VN				
	RW: KE, MW, SD, SZ, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	US 5470847	A	19951128	US 1993-165309	19931210
	AU 9513041	A1	19950627	AU 1995-13041	19941208
	US 5643944	A	19970701	US 1995-477189	19950607
	US 5721278	A	19980224	US 1995-477187	19950607
PRAI	US 1993-165309		19931210		
	WO 1994-US14133		19941208		

=> d 122 3 all

L22 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2003 ACS  
AN 1995:795168 CAPLUS  
DN 123:189355  
TI Ovulation control by regulating nitric oxide levels  
IN Garfield, Robert E.; Yallampalli, Chandrasekhar  
PA Board of Regents, University of Texas System, USA  
SO PCT Int. Appl., 30 pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
IC ICM A61K031-195  
CC 2-3 (Mammalian Hormones)  
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI WO 9515753 A1 19950615 WO 1994-US14133 19941208  
W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, ES, FI, GB, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LT, LU, LV, MD, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT, UA, UZ, VN  
RW: KE, MW, SD, SZ, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG

US 5470847 A 19951128 US 1993-165309 19931210  
AU 9513041 A1 19950627 AU 1995-13041 19941208  
US 5643944 A 19970701 US 1995-477189 19950607  
US 5721278 A 19980224 US 1995-477187 19950607

PRAI US 1993-165309 19931210  
WO 1994-US14133 19941208

AB Inhibition of ovulation in a female may be achieved by administering a nitric oxide synthase inhibitor, alone or in combination with one or more of a progestin, an estrogen, and an LH-RH antagonist, thereby preventing conception. The stimulation of ovulation in a female may be achieved by administering a nitric oxide source, optionally in further combination with one or more of clomiphene, a gonadotropin, and an LH-RH agonist. Thus, 27 days old immature rats were injected with 4 IU of pregnant mare's serum gonadotropin on day 0. Two days later rats were injected with 40 mg of NG-nitro-L-arginine Me ester at 12 AM and 3 PM and animals were sacrificed one day later and examd. for the ovulatory response by counting the no. of Graafian follicles 3 and corpora lutea 5 in the ovaries. The no. of Graafian follicles and corpora lutea was 9.7 and 0.7 resp. as compared to 1.0 and 10.0 for the controls.

ST ovulation control nitric oxide synthase inhibition; conception prevention  
nitric oxide synthase inhibition

IT **Contraceptives**  
Insemination, artificial  
Ovarian cycle  
Ovulation  
Pituitary gland  
(ovulation control by regulating nitric oxide levels)

IT Estrogens  
Gonadotropins  
Progestogens  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)  
(ovulation control by regulating nitric oxide levels)

IT Fertilization  
(extracorporeal, ovulation control by regulating nitric oxide levels)

IT Gonadotropins  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)  
(inhibitors, ovulation control by regulating nitric oxide levels)

IT 9034-40-6, GnRH 103733-02-4  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)  
(antagonists; ovulation control by regulating nitric oxide levels)

IT 50-28-2, 17.beta.-Estradiol, biological studies 50-50-0, Estradiol benzoate 55-63-0, Nitroglycerin 57-63-6, Ethinyl estradiol 57-83-0, Progesterone, biological studies 68-23-5, Norethinodrel 74-79-3, L-Arginine, biological studies 87-33-2, Isosorbide dinitrate 434-22-0, 19-Nortestosterone 520-85-4, Medroxyprogesterone 911-45-5, Clomiphene 2149-70-4 6533-00-2, Norgestrel 9002-67-9, LH 9034-40-6D, Lh-rh, analogs 14402-89-2, Sodium nitroprusside 16051-77-7, Isosorbide mononitrate 17035-90-4 17230-88-5, Danazol 20933-81-7 34973-08-5, Gonadorelin acetate 35189-28-7, Norgestimate 50903-99-6 54024-22-5, Desogestrel 57444-72-1 60282-87-3, Gestodene 74381-53-6, Leuprolide acetate 76932-60-0, Nafarelin acetate 125978-95-2, Nitric oxide synthase 137361-05-8

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)  
(ovulation control by regulating nitric oxide levels)

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(FILE 'HOME' ENTERED AT 15:25:42 ON 16 APR 2003)

FILE 'REGISTRY' ENTERED AT 15:25:51 ON 16 APR 2003

L1 4 S NAME  
L2 5 S MIFEPRISTONE  
L3 0 S ORG31710  
L4 0 S ORG 3171-  
L5 1 S ORG 31710  
L6 1 S L5  
L7 1 S L5  
L8 1 S ORG 33628  
L9 1 S J 867  
L10 1 S CDB 2914  
L11 1 S ZK 137316

FILE 'CAPLUS' ENTERED AT 15:30:05 ON 16 APR 2003

L12 21216 S NITRIC OXIDE SYNTHASE  
L13 1379 S L1  
E FERTILITY  
L14 27611 S E3  
L15 6 S L14 AND L13  
L16 23 S L14 AND L12  
L17 18 S L16 NOT L15  
E IMPLANTATION  
L18 78734 S E3  
L19 99 S L18 AND L12  
L20 5 S L19 AND L13  
E CONTRACEPTION  
L21 14591 S E3-E10  
L22 3 S L21 AND L13

=> s 12

L23 1816 L2

=> s 123 and 121

L24 188 L23 AND L21

=> d 124 170-188

L24 ANSWER 170 OF 188 CAPLUS COPYRIGHT 2003 ACS

AN 1988:738 CAPLUS

DN 108:738

TI Effects of RU38486, an antiprogesterone agent, on endometrium, fertilized ovum and serum sex steroid levels in rats

AU Ohtani, Kaori; Sakamoto, Hideki; Takahashi, Toru; Satoh, Nobuyoshi; Den, Konbai; Takagi, Shigeo

CS Sch. Med., Nihon Univ., Tokyo, Japan

SO Nippon Sanka Fujinka Gakkai Zasshi (1987), 39(10), 1709-14

CODEN: NISFAY; ISSN: 0300-9165

DT Journal

LA Japanese

L24 ANSWER 171 OF 188 CAPLUS COPYRIGHT 2003 ACS

AN 1987:629242 CAPLUS  
DN 107:229242  
TI Contraception by the progesterone antagonist RU 486: a novel approach to human fertility control  
AU Baulieu, Etienne Emile  
CS Lab. Horm., Fac. Med., Bicetre, 94275, Fr.  
SO Contraception (1987), 36(Suppl.), 1-5  
CODEN: CCPTAY; ISSN: 0010-7824  
DT Journal; General Review  
LA English

L24 ANSWER 172 OF 188 CAPLUS COPYRIGHT 2003 ACS  
AN 1987:547556 CAPLUS  
DN 107:147556  
TI Interception. III: Postcoital luteal contraception by an antiprogesterin (mifepristone, RU 486) in 62 women  
AU Van Santen, M. R.; Haspels, A. A.  
CS Dep. Obstet. Gynecol., Utrecht Univ. Hosp., Utrecht, Neth.  
SO Contraception (1987), 35(5), 423-31  
CODEN: CCPTAY; ISSN: 0010-7824  
DT Journal  
LA English

L24 ANSWER 173 OF 188 CAPLUS COPYRIGHT 2003 ACS  
AN 1987:527350 CAPLUS  
DN 107:127350  
TI Interception. IV: Failure of mifepristone (RU 486) as a monthly contraceptive, "Lunarette"  
AU Van Santen, M. R.; Haspels, A. A.  
CS Dep. Obstet. Gynecol., Utrecht Univ. Hosp., Utrecht, Neth.  
SO Contraception (1987), 35(5), 433-8  
CODEN: CCPTAY; ISSN: 0010-7824  
DT Journal  
LA English

L24 ANSWER 174 OF 188 CAPLUS COPYRIGHT 2003 ACS  
AN 1987:509393 CAPLUS  
DN 107:109393  
TI Contraception by antiprogesterin RU 486: a novel approach to human fertility control  
AU Baulieu, E. E.; Ulmann, A.; Philibert, D.  
CS Lab-Hormones, Univ. Paris-Sud, Bicetre, 94275, Fr.  
SO Sero Symposia Publications from Raven Press (1987), 36(Fertil. Regul. Today Tomorrow), 55-73  
CODEN: SPRPDU; ISSN: 0733-897X  
DT Journal; General Review  
LA English

L24 ANSWER 175 OF 188 CAPLUS COPYRIGHT 2003 ACS  
AN 1987:423577 CAPLUS  
DN 107:23577  
TI Preparation of estradienolone derivatives useful as antiglucocorticoids and antiprogesteromimetics, and their pharmaceutical formulation  
IN Torelli, Vesperto; Teutsch, Jean G.; Philibert, Daniel  
PA Roussel-UCLAF, Fr.  
SO U.S., 41 pp. Cont.-in-part of U.S. 4,519,946.  
CODEN: USXXAM  
DT Patent  
LA English

FAN.CNT 6

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	US 4634695	A	19870106	US 1985-693682	19850122
	FR 2497807	A1	19820716	FR 1981-272	19810109
	FR 2497807	B1	19830729		
	US 4386085	A	19830531	US 1982-338077	19820108
	US 4447424	A	19840508	US 1982-386967	19820610
	US 4519946	A	19850528	US 1984-614440	19840525
	US 4978657	A	19901218	US 1985-810316	19851217
	US 5043332	A	19910827	US 1989-421526	19891013
PRAI	FR 1981-272		19810109		
	US 1982-338077		19820108		
	US 1982-386967		19820610		
	US 1984-595267		19840330		
	US 1984-614440		19840525		
	FR 1982-10205		19820611		
	FR 1982-70205		19820611		
	US 1983-501373		19830606		
	US 1985-693682		19850122		
	US 1985-760703		19850730		
	US 1985-810316		19851217		

L24 ANSWER 176 OF 188 CAPLUS COPYRIGHT 2003 ACS

AN 1987:113695 CAPLUS

DN 106:113695

TI The progesterone antagonist RU 486. A potential new **contraceptive** agent

AU Nieman, Lynnette K.; Choate, Teresa M.; Chrousos, George P.; Healy, David L.; Morin, Martin; Renquist, David; Merriam, George R.; Spitz, Irving M.; Bardin, C. Wayne; et al.

CS Dev. Endocrinol. Branch, Natl. Inst. Child Health Hum. Dev., Bethesda, MD, USA

SO New England Journal of Medicine (1987), 316(4), 187-91

CODEN: NEJMAG; ISSN: 0028-4793

DT Journal

LA English

L24 ANSWER 177 OF 188 CAPLUS COPYRIGHT 2003 ACS

AN 1987:78799 CAPLUS

DN 106:78799

TI Fertility control in women: results with RU 486 by the end of 1985

AU Baulieu, Etienne

CS Lab. Horm., INSERM U33, Bicetre, 94275, Fr.

SO Journal of Steroid Biochemistry (1986), 25(5B), 847-51

CODEN: JSTBBK; ISSN: 0022-4731

DT Journal; General Review

LA English

L24 ANSWER 178 OF 188 CAPLUS COPYRIGHT 2003 ACS

AN 1986:565206 CAPLUS

DN 105:165206

TI Studies on the antireproductive mechanisms of action of RU 486

AU Rojas, Francisco J.; O'Conner, James L.; Asch, Ricardo H.

CS Health Sci. Cent., Univ. Texas, San Antonio, TX, USA

SO Antiprogesterin Steroid RU 486 Hum. Fertil. Control, [Proc. Conf. Antiprogesterin Steroid RU 486] (1985), Meeting Date 1984, 141-54. Editor(s): Baulieu, Etienne-Emile; Segal, Sheldon Jerome. Publisher: Plenum, New York, N. Y.

CODEN: 55DHAY

DT Conference

LA English

L24 ANSWER 179 OF 188 CAPLUS COPYRIGHT 2003 ACS

AN 1986:565028 CAPLUS



DN 105:165028  
TI RU 486: an antiprogesterone steroid with contragestive activity in women  
AU Baulieu, Etienne Emile  
CS Lab. Horm., Univ. Paris Sud, Bicetre, 94270, Fr.  
SO Antiprogesterone Steroid RU 486 Hum. Fertil. Control, [Proc. Conf. Antiprogesterone Steroid RU 486] (1985), Meeting Date 1984, 1-25.  
Editor(s): Baulieu, Etienne-Emile; Segal, Sheldon Jerome. Publisher: Plenum, New York, N. Y.  
CODEN: 55DHAY  
DT Conference; General Review  
LA English

L24 ANSWER 180 OF 188 CAPLUS COPYRIGHT 2003 ACS  
AN 1986:435637 CAPLUS  
DN 105:35637  
TI Antiprogesterone activity of RU 486 and its contragestive and other applications  
AU Baulieu, E. E.; Ulmann, A.  
CS Fac. Med., INSERM 33, Bicetre, 94275, Fr.  
SO Human Reproduction (1986), 1(2), 107-10  
CODEN: HUREEE; ISSN: 0268-1161  
DT Journal; General Review  
LA English

L24 ANSWER 181 OF 188 CAPLUS COPYRIGHT 2003 ACS  
AN 1986:219236 CAPLUS  
DN 104:219236  
TI Steroid antihormones: the antiprogesterone activity of RU 486 and its **contraceptive** and other uses.  
AU Baulieu, Etienne Emile; Ulmann, Andre  
CS Univ. Paris-Sud, Paris, Fr.  
SO Bulletin de l'Academie Nationale de Medecine (Paris, France) (1985), 169(8), 1191-9  
CODEN: BANMAC; ISSN: 0001-4079  
DT Journal; General Review  
LA French

L24 ANSWER 182 OF 188 CAPLUS COPYRIGHT 2003 ACS  
AN 1986:200466 CAPLUS  
DN 104:200466  
TI Modulation of aromatase activity in human endometrial stromal cells by steroids, tamoxifen and RU 486  
AU Tseng, Linda; Mazella, James; Sun, Boling  
CS Sch. Med., State Univ. New York, Stony Brook, NY, 11794, USA  
SO Endocrinology (1986), 118(4), 1312-18  
CODEN: ENDOAO; ISSN: 0013-7227  
DT Journal  
LA English

L24 ANSWER 183 OF 188 CAPLUS COPYRIGHT 2003 ACS  
AN 1986:142404 CAPLUS  
DN 104:142404  
TI The antiprogesterone steroid RU-486 does not impair gonadotropin-stimulated luteal adenylyl cyclase activity or gonadotropin release by pituitary cells  
AU Rojas, Francisco J.; O'Conner, James L.; Asch, Ricardo H.  
CS Health Sci. Cent., Univ. Texas, San Antonio, TX, 78284, USA  
SO Journal of Steroid Biochemistry (1985), 23(6A), 1053-8  
CODEN: JSTBBK; ISSN: 0022-4731  
DT Journal  
LA English

L24 ANSWER 184 OF 188 CAPLUS COPYRIGHT 2003 ACS  
 AN 1985:589900 CAPLUS  
 DN 103:189900  
 TI Contraception by antiprogesterin: a new approach to human fertility control  
 AU Baulieu, Etienne Emile  
 CS Fac. Med. Bicetre, Univ. Paris Sud, Bicetre, 94270, Fr.  
 SO Ciba Foundation Symposium (1985), 115(Abortion), 192-210  
 CODEN: CIBSB4; ISSN: 0300-5208  
 DT Journal; General Review  
 LA English

L24 ANSWER 185 OF 188 CAPLUS COPYRIGHT 2003 ACS  
 AN 1985:516457 CAPLUS  
 DN 103:116457  
 TI Pregnancy prevention by intravaginal delivery of a progesterone antagonist: RU486 tampon for menstrual induction and absorption  
 AU Hodgen, Gary D.  
 CS Jones Inst. Reprod. Med., East. Virginia Med. Sch., Norfolk, VA, 23507, USA  
 SO Fertility and Sterility (1985), 44, 263-7  
 CODEN: FESTAS; ISSN: 0015-0282  
 DT Journal  
 LA English

L24 ANSWER 186 OF 188 CAPLUS COPYRIGHT 2003 ACS  
 AN 1985:481878 CAPLUS  
 DN 103:81878  
 TI The antiprogesterone activity of RU 486, a contraceptive agent in the human  
 AU Sakiz, E.; Euvrard, C.; Baulieu, E. E.  
 CS Roussel-Uclaf, Paris, 75007, Fr.  
 SO International Congress Series (1984), 655(Endocrinology), 239-42  
 CODEN: EXMDA4; ISSN: 0531-5131  
 DT Journal  
 LA English

L24 ANSWER 187 OF 188 CAPLUS COPYRIGHT 2003 ACS  
 AN 1985:215412 CAPLUS  
 DN 102:215412  
 TI The effects of RU486 on the luteal phase of the rhesus monkey  
 AU Asch, Ricardo H.; Rojas, Francisco J.  
 CS Health Sci. Cent., Univ. Texas, San Antonio, TX, 78284, USA  
 SO Journal of Steroid Biochemistry (1985), 22(2), 227-30  
 CODEN: JSTBBK; ISSN: 0022-4731  
 DT Journal  
 LA English

L24 ANSWER 188 OF 188 CAPLUS COPYRIGHT 2003 ACS  
 AN 1984:530975 CAPLUS  
 DN 101:130975  
 TI Steroid derivatives  
 IN Teutsch, Jean G.; Costerousse, Germain; Philibert, Daniel; Deraedt, Roger  
 PA Roussel-UCLAF, Fr.  
 SO U.S., 33 pp. Cont.-in-part of U.S. 4,386,085.  
 CODEN: USXXAM  
 DT Patent  
 LA English  
 FAN.CNT 6

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 4447424	A	19840508	US 1982-386967	19820610
	FR 2497807	A1	19820716	FR 1981-272	19810109

	FR 2497807	B1	19830729		
	US 4386085	A	19830531	US 1982-338077	19820108
	US 4519946	A	19850528	US 1984-614440	19840525
	US 4634695	A	19870106	US 1985-693682	19850122
	US 4978657	A	19901218	US 1985-810316	19851217
	US 5043332	A	19910827	US 1989-421526	19891013
PRAI	FR 1981-272		19810109		
	US 1982-338077		19820108		
	US 1982-386967		19820610		
	FR 1982-10205		19820611		
	FR 1982-70205		19820611		
	US 1983-501373		19830606		
	US 1984-595267		19840330		
	US 1984-614440		19840525		
	US 1985-693682		19850122		
	US 1985-760703		19850730		
	US 1985-810316		19851217		

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L15	6 S L14 AND L13
L16	23 S L14 AND L12
L17	18 S L16 NOT L15
	E IMPLANTATION
L18	78734 S E3
L19	99 S L18 AND L12
L20	5 S L19 AND L13
	E CONTRACEPTION
L21	14591 S E3-E10
L22	3 S L21 AND L13
L23	1816 S L2
L24	188 S L23 AND L21

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L24 ANSWER 188 OF 188 CAPLUS COPYRIGHT 2003 ACS  
 AN 1984:530975 CAPLUS  
 DN 101:130975  
 TI Steroid derivatives  
 IN Teutsch, Jean G.; Costerousse, Germain; Philibert, Daniel; Deraedt, Roger  
 PA Roussel-UCLAF, Fr.

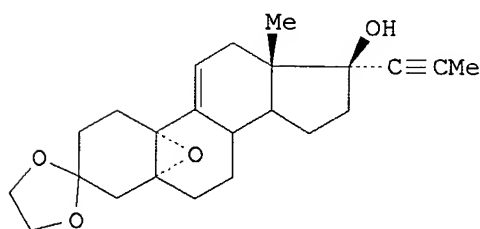
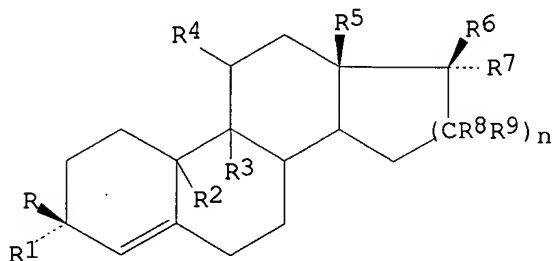
SO U.S., 33 pp. Cont.-in-part of U.S. 4,386,085.  
 CODEN: USXXAM  
 DT Patent  
 LA English  
 IC A01N045-00; A61K031-56  
 NCL 424238000  
 CC 32-5 (Steroids)

Section cross-reference(s): 1, 2

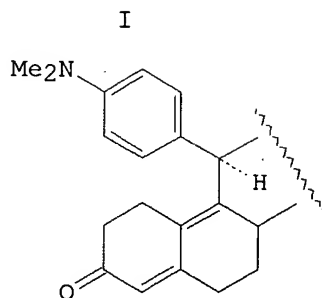
FAN.CNT 6

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 4447424	A	19840508	US 1982-386967	19820610
	FR 2497807	A1	19820716	FR 1981-272	19810109
	FR 2497807	B1	19830729		
	US 4386085	A	19830531	US 1982-338077	19820108
	US 4519946	A	19850528	US 1984-614440	19840525
	US 4634695	A	19870106	US 1985-693682	19850122
	US 4978657	A	19901218	US 1985-810316	19851217
	US 5043332	A	19910827	US 1989-421526	19891013
PRAI	FR 1981-272		19810109		
	US 1982-338077		19820108		
	US 1982-386967		19820610		
	FR 1982-10205		19820611		
	FR 1982-70205		19820611		
	US 1983-501373		19830606		
	US 1984-595267		19840330		
	US 1984-614440		19840525		
	US 1985-693682		19850122		
	US 1985-760703		19850730		
	US 1985-810316		19851217		

GI



II



III

AB Antigluco corticoid and **contraceptive** norsteroids I [RR1 = O, ketal, HON:, CH2:; R = HO, alkoxy, acyloxy, R1 = H; R2R3 = O, bond; R4 = N-, P- or Si-contg. radical, i.e. pyridyl, dimethylaminoalkyl, 4-(Me2NCH2CH2O)C6H4, pyrrolidinophenyl, etc.; R5 = C1-C8 alkyl; R6, R7 = H, HO, alkoxy, acyloxy, HOCH2CO, HO2CCO, alkylcarbamoyle, etc.; R8, R9 =

HO, H, alkyl aralkyl; n = 1, 2; optional 16-unsatd.] were prepd. by ring cleavage of epoxyestrene derivs. by Grignard reagents. Thus, treatment of epoxypropynylestrene II with 4-(Me2N)C6H4MgBr in THF contg. CuBr-Me2S complex and subsequent acid hydrolysis gave (aminophenyl)propynylestradiene III. At 10 mg/kg/day for 3 days in female rats III inhibited implantation 100g, whereas at 500 .mu.g/animal in the rabbit III was devoid of progestomimetic activity.

- ST aminophenylestradienone prepn **contraceptive**; estradienone  
aminophenyl prepn **contraceptive**; epoxyestrenol ring cleavage  
Grignard reagent; antiglucocorticoide estradienone
- IT Abortion  
(by nitrogen-contg. radical substituted estradienones)
- IT Androgens  
Progestogens  
RL: USES (Uses)  
(inhibitors, nitrogen-contg. radical substituted estradienones)
- IT **Contraceptives**  
(nitrogen-contg. radical substituted estradienones)
- IT 19-Norsteroids  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of, of nitrogen-contg. radical substituted estradienones)
- IT 106-95-6, reactions 109-54-6 586-77-6 626-61-9 1066-54-2  
2052-06-4 2474-07-9 6274-57-3 6999-03-7 16518-62-0 22090-26-2  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(Grignard ring cleavage reaction of, with epoxyestrenol deriv.)
- IT 91935-18-1  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(Grignard ring cleavage reaction of, with epoxyetrenol deriv.)
- IT 78-80-8 463-49-0 536-74-3 591-51-5  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(addn. reaction of, with (aminophenyl)estrenone deriv.)
- IT 74-99-7  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(addn. reaction of, with estradienone deriv.)
- IT 5571-36-8  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(addn. reaction of, with propyne)
- IT 100-61-8, reactions  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(alkylation of, by isoamyl bromide)
- IT 91-66-7  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(bromination of)
- IT 79-01-6, reactions  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(dechlorination and addn. reaction with (aminophenyl)estrenone deriv.)
- IT 91934-73-5  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(epimerization of)
- IT 33403-21-3  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(epoxide ring cleavage of, with aminophenylmagnesium bromide deriv.)
- IT 90944-65-3P 91935-10-3P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(prepn. and Grignard ring cleavage reaction of, with epoxyestrenol  
deriv.)
- IT 91934-77-9P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(prepn. and addn. reaction of, with phenyllithium)
- IT **84371-65-3P** 91934-81-5P 91934-84-8P 91934-85-9P

91934-86-0P 91934-89-3P 91935-00-1P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and antiglucocorticoid and **contraceptive** activities of)

IT 91934-93-9P 91934-98-4P 91984-11-1P 92009-03-5P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and antiglucocorticoid and **contraceptive** activity of)

IT 91935-09-0P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (prepn. and bromination of)

IT 39931-87-8P 91934-74-6P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (prepn. and epoxide ring cleavage of, by Grignard reagents)

IT 84371-57-3P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (prepn. and epoxide ring cleavage reactions of, with Grignard reagents)

IT 84371-69-7P 92009-02-4P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (prepn. and epoxidn. of)

IT 91935-04-5P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (prepn. and hydrogenation of)

IT 84371-60-8P 84371-62-0P 84371-64-2P 89359-46-6P 91934-71-3P  
 91934-75-7P 91934-78-0P 91934-80-4P 91934-83-7P 91934-88-2P  
 91934-90-6P 91934-91-7P 91934-95-1P 91934-96-2P 91934-99-5P  
 91935-01-2P 91935-03-4P 91935-05-6P 91935-07-8P 91935-11-4P  
 91935-13-6P 91935-15-8P 91935-19-2P 93790-79-5P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (prepn. and hydrolysis of)

IT 91934-94-0P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (prepn. and reaction of, with lithium acetylide complex)

IT 84371-58-4P 84371-59-5P 84371-61-9P 84371-63-1P 84371-67-5P  
 84395-11-9P 89328-06-3P 91934-72-4P 91934-76-8P 91934-79-1P  
 91934-82-6P 91934-87-1P 91934-92-8P 91934-97-3P 91935-02-3P  
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 91935-17-0P 91935-20-5P 91935-21-6P 91935-22-7P 91935-23-8P  
 91935-24-9P 91935-25-0P 91935-26-1P 91935-27-2P 91935-28-3P  
 91935-29-4P 91935-30-7P 91935-31-8P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. of)

IT 39990-99-3  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reaction of, with cyanoestrenol deriv.)

IT 4584-46-7  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (substitution reaction of, with bromothiophenol)

IT 106-53-6  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (substitution reaction of, with dimethylaminoethyl chloride)

IT 107-82-4  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (substitution reaction of, with methylaniline)

=> d his

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L14 27611 S E3  
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L16 23 S L14 AND L12  
L17 18 S L16 NOT L15  
E IMPLANTATION  
L18 78734 S E3  
L19 99 S L18 AND L12  
L20 5 S L19 AND L13  
E CONTRACEPTION  
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L23 1816 S L2  
L24 188 S L23 AND L21

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